



MANUFACTURERS' RECORD

A WEEKLY SOUTHERN INDUSTRIAL, RAILROAD AND FINANCIAL NEWSPAPER

Trade-Name Registered in the U. S. Patent Office

VOL. LI. No. 19.
WEEKLY.

BALTIMORE, MAY 23, 1907.

\$4.00 A YEAR.
(SINGLE COPIES, 10 CENTS.)

Manufacturers' Record.

PUBLISHED EVERY THURSDAY BY THE
MANUFACTURERS' RECORD PUBLISHING CO.
BALTIMORE.

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Subscription, - - - - - \$4 a year
(payable in advance) to United States,
Mexico, Cuba, Porto Rico, Hawaii and the
Philippines.

To Foreign Countries (including Canada) in
the Postal Union, \$6.50 a year.

[Entered at the Baltimore Postoffice as sec-
ond-class matter.]

BALTIMORE, MAY 23, 1907.

PROFESSIONAL OR PRODUCTIVE?

Figures dealing with the occupations of 2243 men graduated by Yale University between 1897 and 1902 are causing comments of various kinds in the press of the country. The figures show 718 graduates in law, 320 in finance, 261 in education, 203 in medicine, 185 in the ministry, 170 in farming and politics—rather an odd grouping—166 in mercantile life, 77 in journalism, 69 in engineering and 74 in miscellaneous occupation. It is a sign of the times—a sign promising much more for the future good of the country—that the general trend of the comments is toward regret that the figures show such a large preponderance of graduates in professional or competitive occupations over those in productive pursuits, so many more living on the community than for the community.

Contrasting with the figures for Yale graduates are the figures arranged by Prof. L. S. Randolph of the department of mechanical engineering of the Virginia Polytechnic Institute at Blacksburg, showing the position and earnings of men who have graduated from the department between 1895 and 1905. These show 32 mechanical engineers, 20 draughtsmen, 10 superintendents and assistant superintendents, 7 electrical engineers, 6 teachers, 5 civil engineers, 4 marine engineers, 3 mining engineers, 3 managers, 3 inspectors, 2 presidents, 2 apprentices and 1 clerk.

The average salary* of these men is \$1774 a year, and the average salary of

men graduating in each year is shown in the following table:

| Class. | Salary. |
|-----------|---------|
| 1895..... | \$4653 |
| 1896..... | 1336 |
| 1897..... | 1400 |
| 1898..... | 2500 |
| 1899..... | 2020 |
| 1900..... | 2000 |
| 1901..... | 1397 |
| 1902..... | 1332 |
| 1903..... | 1004 |
| 1904..... | 1077 |
| 1905..... | 801 |

Here is a comparatively slight indication of the call for men to head the productive enterprises of the country, increasing rapidly in number and widening vastly the scope of their operations. In no part of the country is the call stronger and louder than in the South, and the work of such institutions as the Virginia Polytechnic should be heartily sustained not only through liberal appropriations from the State insuring adequate equipment to meet the increasing demands, but also through encouragement to young men to devote their lives to professions or occupations that may mean work, and hard work at that, but which nevertheless conduce to material advancement.

Advertisements of Southern localities offering special advantages for the location of manufacturing enterprises will be found on pages 75, 76, 77 and 78.

LIBERALITY TOWARD RAILROADS.

Mr. William R. Belknap, president of the Belknap Hardware & Manufacturing Co. of Louisville, Ky., writes to the MANUFACTURERS' RECORD as follows:

I thought you would be interested in seeing the resolutions which were passed practically unanimously by our Board of Trade in open meeting, which had been called May 10 for the purpose of considering them. There has been so much demagogism at the cost of the railroads that we business men here thought it was time to stop it as far as we could. You may be able to make use of these in some shape, and I trust that you will.

The MANUFACTURERS' RECORD is not only interested in reading the resolutions, but believes that they will interest many other commercial bodies in the country, as well as a large number of individuals, and therefore reproduces the resolutions, as follows:

Be it resolved by the Louisville Board of Trade that we believe that the population, prosperity and wealth of Kentucky would be greatly enhanced by the construction of large additional railroad mileage for the purpose of opening up and developing and making available the enormously valuable resources of the State, now largely unavailable because of the lack of transportation facilities.

In this project of upbuilding our State and developing its resources every good citizen is interested for himself and for his children, without regard to wealth or occupation, but particularly are those interested who may properly look to the development of Kentucky as a place to establish their own fortunes and as a satisfactory abode for the generations that are to come after them.

To secure these additional facilities almost any reasonable sacrifice or effort consistent with public morality would be justified. This State, the first discovered and settled State west of the Atlantic seaboard, should now be foremost in population, wealth, education

and industrial development. It is not so, largely because it has denied itself, or has been denied, the benefits of transportation facilities. The property valuation in Kentucky on which assessments are levied for local and State governments should exceed that of any other State west of the Allegheny mountains. How far short Kentucky comes of these standards is well known, and we believe that lack of transportation facilities is largely responsible for the existing conditions.

This Board of Trade favors the utmost liberality on the part of the State, county and municipal authorities of Kentucky towards all transportation companies which in good faith and strict conformity with the national and State laws undertake to furnish us transportation facilities. We believe that in order to enjoy the benefits that come from the State's development the public should be willing that investments in the means of transportation should be profitable, and sufficiently so to tempt those who provide the capital for such enterprises—whether residents of the State or not—to rapidly increase their investments in the State until every part of Kentucky that is now inaccessible or not fully served is made accessible to markets for its products and supplies.

We believe that the public has taken such a critical and almost hostile attitude toward the railroad interests that the absolute necessity for the extensive and immediate development of the means of transportation in our State, if our State is ever to maintain its present position, is being overlooked. It certainly should not be overlooked in Kentucky. We should seize the opportunity that is presented by legislation in other States, tending to make further railroad construction there unprofitable, to attract railroad capital to Kentucky. We should offer the equal protection of the law, fair treatment and an assurance that those who are willing to benefit Kentucky by making investments in the State will have the good will of her people.

This Board favors legislation, if such be necessary, to prevent fictitious capitalization, while demanding the enforcement of laws to correct corporate abuses, as well as the punishment of those who fail to obey such laws, but it believes that what is now in order and for the interest of the public, as well as for the interest of the railroads, is co-operation between the people of the State and the railroads, with a view to the good of both. We believe that if the railroads honestly accept their responsibilities to the public and endeavor to live up to them, then the public should as honestly strive to make the business of the railroads successful and profitable. Public hostility, harsh criticism and drastic legislation can serve no good end.

It is undoubtedly a true economic proposition that the losses of a business as well as the profits depend on the earnings of the business. In applying this proposition, we believe it is true that any excessive expense or damage that the public or its individual members inflicts upon the railroads in any way whatever, either in excessive taxes, damages for personal injury or any other items that go to make up the cost of operation, must be met by the public in the shape of payment for transportation; hence the best way for the public to secure cheap transportation and satisfactory service and moderate laws fairly and justly administered.

On all new railroad mileage built in the State, either by existing railroad companies or other companies desiring to come into the State, or by any other individuals or corporations who desire to develop and enrich the State by providing it with increased means of transportation, we favor 10 years' exemption from all taxes—State, county and municipal.

The Louisville Board of Trade invites the serious consideration of all the citizens of the State of Kentucky to this question, and asks their co-operation in an effort that it feels that the people of this State should

make to secure, within the next 10 years, the necessary additional railroad facilities to the extent of at least double the mileage that now exists within the State, and asks that the commercial, manufacturing, municipal and county bodies consider in what way they can aid in bringing about this result.

It is hardly necessary to tell anyone acquainted with the wonderful natural resources of Kentucky that more railroad facilities are an absolute requisite to the full development of the State. With a land area of 40,000 square miles, Kentucky has only 3405 miles of railroad, or one mile of railroad for about every 12 miles of area. Full of material for industry, the State has been comparatively slow in railroad building. Between 1880 and 1890 its mileage increased only from 1530 to 2042 miles, and between 1890 and 1900 but 152 miles were added, or at the rate of about 15 miles a year. Many of the other Southern States are building every year more miles of railroad than Kentucky built in the whole decade 1890-1900. There has been some improvement latterly, however, and in the past six years 311 miles were constructed, and quite as great a mileage is now under construction or definitely planned. Kentucky's possibilities in this particular are indicated in the fact that Massachusetts has one mile of railroad for every three or four square miles of territory, and that the New England States as a whole, with a combined area 50 per cent. greater than that of Kentucky, have more than twice its railroad mileage, or one mile of railroad for every eight square miles of territory. There is every reason in nature why Kentucky should equal Massachusetts railroad mileage as compared with its area. When that equality shall exist, Kentucky, full of advantages as to the material to be developed into wealth through industry which Massachusetts utterly lacks, should be able to surpass Massachusetts in manufacturing, agriculture and wealth.

A long step in that direction will have been taken when public sentiment in Kentucky has come to the point of putting into effect the principles of broad-minded liberality toward transportation interests set forth in the resolutions of the Louisville Board of Trade.

AN EDUCATIONAL ISSUE NOT TO BE CLOUDED.

When one's position on any subject is easily pregnable it is a favorite device, appealing to the unthinking but confessed weakness to the thinking, to attempt to credit an assailant with one's own tactics. That has been a resort of what is known popularly as the Ogden Movement, and an illustration of it is given in the ease with which a couple of denominational papers have been led to become the mediums for furthering it. The Baptist Argus of Louisville, Ky., quotes the Baptist Record of Mississippi as follows:

It is now more than hinted that the crusade against what is called the "Rockefeller

subsidy" of \$32,000,000 given to benevolence is instigated and agitated by some little-souled millionaires who feel themselves made small in an age so full of personal aggrandizement and religious littleness and prejudice. It is the old trick of the "devilfish" which makes the water murky with his own black gill and then escapes.

It would be interesting for the *Baptist Record* to name the original source of the hint, side-splitting for men of intelligence and acquaintance with the methods of the Educational Trust, that any millionaires are crusading against the Trust. The Mississippi paper is probably unaware that it is a victim of tactics of the cuttlefish, which seeks to escape by beclouding the water around it. Commenting upon the suggestion, the *Argus* of Louisville says:

It always sounds inconsistent to the *Argus* when people say the General Education Board proposes to enslave the people by educating. Education and slavery do not go together.

It would be interesting if the *Argus* would name the persons who say that the General Education Board proposes to enslave the people by education. What the General Education Board really proposes to do God only knows. The cuttlefish tactics have been quite effective in concealing its purpose, but careful study of what it has done and what it has said through its representatives indicates pretty clearly what will be the results of its purpose if the patriotism of the country does not circumvent it. Perhaps if the *Argus* ponders upon the subject long enough and considers carefully the meaning of the word "education" it will not hold to its proposition that education and slavery do not go together. For example, it may discover that the training given several million negroes in bondage in the South was the best education ever given to negroes in the world. It may discover, too, that a Movement assuming to dominate the machinery if not the methods of general education in the country may educate the people of the country into virtual slavery to the influences dominating the Movement.

THE DEMAND FOR FAST TRAINS.

Inspired by thought on the subject by serious train wrecks during the past year, railroad men and students of transportation affairs have been talking and writing more or less about the dangers of high speed upon our railways. The utterances of some of these gentlemen indicate a belief that it is necessary to call a halt upon the demands for high speed and to abandon efforts to move trains at any speed beyond a certain rate. In fact, some railroad companies have established slower schedules for their fastest trains.

Undoubtedly there is wisdom in this movement to check reckless railroad-ing. A speed which would be safe enough upon a line heavily constructed and approximately straight and level becomes perilous when established on a line of sharp curves and heavy grades. Yet in the rivalry which has existed between some of the railroads unsafe speeds have been adopted on certain lines as the result of competition for the favor of the public. Upon such lines the movement for a reduction of speed is therefore particularly fitting and commendable.

But it is really idle to talk of or to expect to bring about a general limitation of the speed of railroad trains. The demands of business and social life are constantly pressing towards shortening the time for travel between any given points. As the population of the world increases and human activity be-

comes greater and greater, so in like proportion increases the need for rapid intercommunication. Thirty-six hours from New York to Chicago might have been all right 40 years ago, but 18 hours is none too fast for the business man of 1907. Hence the effort of the railroad companies must necessarily be directed towards improving their lines year by year by bettering the track and by eliminating curves and grades so that on long runs an hour or two may now and then be cut off the schedule. It was only a few years ago, comparatively, that the first train to make the trip from New York to Chicago in 24 hours was regularly run, and since then the public has witnessed a slow but steady reduction in the railroad time between the two cities. In 1876 the first train to regularly run between Baltimore and Philadelphia in three hours was put in service to the Centennial Exposition. Now the time between the two cities on the best trains is less than two hours, and the improvements which are being made on the two double-track railroads which connect these cities promise a further reduction of time in the near future. The public demands high speed, and the demand will be supplied by building the railroads up to its requirements.

Given a perfect railroad track as nearly straight and level as possible, the matter of high speed becomes a question of equipment, skill and discipline. A railroad is like a great machine upon which many different hands are engaged, and for the successful operation of a fast line the most efficient and reliable employees are demanded, not merely for the high-speed trains, but for the operation of trains of slower speed, the proper movement of which is essential to the safety of the expresses. There never was a business in which the safety of the whole depended upon the individual more than it does in railroads, and the busier a line is the more essential is it that the individual should be expert and faithful. The Great Western Railway of England, designed by Brunel, was probably the first notable high-speed railroad in the world. It was finely planned and built, and as far back as 1850 its trains were making speeds of a mile a minute or more with ease. There was a high spirit of pride and loyalty among its employees, which contributed to the rapid movement of trains and to the establishment of that reputation for safety which railroads in England to this day enjoy. These factors of pride and loyalty should not be forgotten by any railroad man, and all officials ought to do everything to encourage and cultivate, as well as to discourage anything which inclines to diminish, them. The line whose men are thus inspired is capable of great results.

One of the gratifying features of railroad work today is that astute managers are endeavoring to create and maintain *esprit de corps* among their forces. This, coupled with the steady construction of improvements to roadbeds, tracks and equipments, shows that the companies, while realizing that in their anxiety to furnish high speed, they may have, for the time being, overstepped the bounds of safety upon some roads, their efforts to furnish the fastest speed possible with safety will not slacken, but they will provide it as promptly as track and other conditions permit.

In his report for May 17 Col. Henry G. Hester, secretary of the New Orleans Cotton Exchange, shows that the amount of cotton brought into sight during 259 days

of the present season was 12,840,837 bales, an increase over the same period last year of 2,555,063 bales; the exports were 7,922,850 bales, an increase of 2,118,671 bales; the takings were, by Northern spinners, 2,360,959 bales, an increase of 189,974; by Southern spinners, 2,023,187 bales, an increase of 113,164 bales.

WATER TRANSPORTATION.

Some figures compiled by the New York *Journal of Commerce* from the records of the Manchester (England) Ship Canal constitute a sound argument in favor of the utilization of waterways in the transportation of commodities. The canal, which was opened in 1894, is now described as really a vast dock 36 miles in length. It is the terminal port for seven of the leading railways of the United Kingdom, and the operating estate has many resources, including 40 locomotives, 1450 cars, sidings to accommodate 9000 cars with 129 miles of track, of which 60 miles are at the docks. Of these there are 9, varying from 560 to 2700 feet in length, and from 120 to 250 feet in breadth, with 13 single-floor, 1 two-floor, 6 three-floor, 5 four-floor and 12 five-floor transit sheds, fitted with modern appliances for handling freight. The canal handled 925,659 tons and had a revenue of about \$480,000 the first year. Its traffic increased to 4,253,354 tons and its revenue to \$2,225,000 in 1905, and there was an increase in 1906 of tonnage to 4,700,924 and of revenue to \$2,470,000. As to the effects of the canal upon commerce and industry, the *Journal of Commerce* says:

"The canal has been and is of enormous use to the trade and industry of the north of England and to distant producers and foreign markets. It has vigorously encouraged exports of every kind—of coal, manufactured iron and steel, textile and other machinery, electric traction equipment and appliances, and all sorts of Manchester goods—for directly owing to the policy of the Ship Canal Company the railway companies have been obliged to ease their carriage charges and the Mersey board have been impelled, in their own interests, to reduce their dock and harbor dues. It has also given an enormous fillip to imports, bringing raw cotton from America, Egypt and British fields to the threshold of the Lancashire mills, and grain, timber, iron ore, pig-iron, lead, oil, fruit, flour, foodstuffs, sugar, meat and cattle in abundance from foreign ports, to many of which there are now regular steamship lines, with owners and agents in Manchester. Owing to the reduced cost and handling of traffic, Manchester now secures a large proportion of the immense shipments of leather from Boston and other North American ports. A good deal of the leather is sent forward direct from ship to the Northampton and Leicester districts, whilst large stocks are retained at the Manchester docks, several of the largest importing merchants having centralized the whole of their leather stocks at Manchester in preference to other ports, and serving from thence not only the Midlands, but also Glasgow, Bristol and other coastal ports. Hides, extracts and other raw materials connected with the tanning industry are brought to Manchester by the steamers arriving from Australia, River Plate, North America, Bordeaux, Jamaica and other ports."

INTEREST IN THE SOUTH.

Mr. T. C. Carter of Meridian, Miss., in subscribing to the MANUFACTURERS' RECORD requests us to mail at his expense copies of the issue of May 9, containing the review of Southern progress, to the banking-house of Peabody, Houghteling & Co., Chicago; John J. Glesner, Chicago; Gerald Brown of the Equitable Life Assurance Co., New York, and Frank H.

Weed of the Provident Life & Trust Co., Philadelphia. This request suggests that others may desire to give a similar exhibition of their practical interest in Southern development.

ALERT BOSTON.

Careful students of life in New England have long held the opinion that that part of the world could not be beaten for public spirit and for the desirable blessings flowing from its exercise, and that Boston led Massachusetts in that respect. It has long been suspected that New Englanders were born co-operating with one another for the general welfare of their section. But Bostonians do not seem to hold that view. One of them, Mr. Elwyn G. Preston, recently proclaimed the following:

"The thing that Boston needs above everything else is the earnest, whole-souled co-operation of her business men for her general good. Our New England conservatism has stood in the way of the 'all-together' methods of new communities. There is a growing recognition of the value of united action in matters affecting general business interests, and this sentiment can be depended upon to increase.

"We have just had an illustration of this newer and more effective method in the recent little scrap with the honorable Secretary of the Treasury over the site for the new appraisers' stores. He told the merchants that the decision was made and was irrevocable. Precisely this same situation arose at New York when their new appraisers' stores were located. The merchants filed a strong protest—and the stores were nevertheless located as proposed. Perhaps 10 years ago our merchants would have contented themselves with filing a protest. As it was, however, there was the most beautiful, artistic uprising of business men I have seen in Boston for years, and as a result the site was abandoned even after it had been purchased.

"I regard this little incident as the most significant object-lesson of what can be accomplished and how it can be accomplished when the merchants actually set out to secure a particular thing that has occurred for a long time.

"This sort of thing involves personal service. It means that business men must be willing to contribute time now and then to the public service. I hold it to be little less than dishonorable for a man to pass his life in a community, get his living and his wealth out of the community and then refuse to give the small return of some public service for the good of the city.

"Let there be a broad, general willingness among our business men to take hold of these movements."

Surprise at any apparent necessity for the preaching in Boston of co-operation by men of affairs yields to admiration of the willingness of a Boston man to acknowledge defects in the community life and to urge their prompt remedying. Self-satisfaction, sometimes called conservatism, is one of the most grievous burdens that a community must carry. Discontent with conditions is the first step toward improvement and advancement. When one considers what Boston has accomplished in spite of a seeming deficiency in public spirit, one must wonder what Boston will do when its business interests really begin to co-operate as they define co-operation. In the meantime, there are quite a number of Southern cities which might be benefited by a study of the Boston spirit and an application of it to their respective conditions.

The Board of Trade of Conway, Ark., has elected Messrs. Capt. W. W. Martin, president; Jo Frauenthal, vice-president; W. N. Owen, secretary, and G. L. Bahner, treasurer.

"FACTS ABOUT THE SOUTH."

Comments of Contemporaries Upon the Latest Comprehensive Review of Material Progress.

From many quarters the MANUFACTURERS' RECORD has received exceedingly gratifying expressions of commendation of the review of material progress in the South since 1880, published in its issue of May 9, and since then issued in pamphlet form with the title "Facts About the South." It is with much pleasure to ourselves, and, we believe, with interest to our readers, that we reproduce some of the comments of our contemporaries, reserving for another occasion the kindly messages received in personal letters.

[Philadelphia (Pa.) Press.]

The MANUFACTURERS' RECORD, published in Baltimore, is the most indefatigable champion and advertiser of the industrial possibilities of the South. Its editor, Mr. Richard H. Edmonds, has just published a pamphlet entitled "Facts About the South," which gives the latest and fullest information available of the growth of the South in recent years and its industrial condition and opportunities. The South, according to the pamphlet, includes all the former slave States except Delaware and Missouri. It includes also the District of Columbia. We should suppose that Delaware and Missouri were quite as much of the South as West Virginia, and nearly as much as Maryland and Kentucky. However, it is otherwise in the book, whose information concerning the 14 States and the District is comprehensive, detailed and ample. It gives a very vivid impression of Southern activities, of a new aggressiveness on its industrial side and the advantages it offers to enterprise and capital, and the avidity with which these opportunities are now being embraced. The pamphlet should be sent for and read widely in the North, for it is of the utmost importance that the South should be known and be understood here, both as a place for the investment of capital and also as the scene of a growing competition that has to be seriously reckoned with at many points.

[Daily Picayune, New Orleans, La.]

We hear a great deal about the rapid and phenomenal development of these Southern States of ours that were once extremely prosperous, but which were devastated and laid waste by a terrible and protracted war in which large numbers of the best men of the country poured out their lifeblood upon innumerable battlefields, in which a thousand millions in property values were swept out of existence and the entire labor system of the country paralyzed.

Some 40 years have elapsed since the close of that terrible war, when the Southern survivors, steeped in poverty and amid incredible difficulties, attempted to revive and rebuild their ruined fortunes. For a long time progress was slow and painful, but today the Southern people are prosperous, and their fair land is blooming with the successful development of its incomparable rich resources, which have barely begun to respond to the magic touch of labor and capital.

As individuals we know of this development only in an indefinite and general way, and it needs some wise observer and able statistician to gather up the facts and to present in a comprehensive, compact form a reliable statement of all that has been achieved in Southern development. This has been done by Mr. Richard H. Edmonds, the distinguished statistician and student of Southern development, who conducts the Baltimore MANUFACTURERS' RECORD. Mr. Edmonds is always on the

alert to keep fully posted on the conditions of the Southern States, and in a compact pamphlet of some 70 pages he has just put forth a statement of the present prosperous condition of these States.

[Richmond (Va.) Evening Journal.]

To Mr. Edmonds and his excellent publication, the MANUFACTURERS' RECORD, the South will ever be indebted for the cheerful confidence with which for the past 25 years he has urged on the citizenship of this section to the development of its natural resources, and for the tireless energy with which he has week by week collated the items of the movement and published to the world the progress of the South toward its own redemption. "Facts About the South" will appeal to every thoughtful man in the South. The figures and forecasts contained therein will without doubt be taken as final authority as to the resources of this section for many years to come.

[Virginian-Pilot, Norfolk, Va.]

It is no exaggeration to say that never before, in any publication, has there appeared so comprehensive and elaborate a review of Southern development, progress and prosperity nor so full and accurate an account of the multitude and magnitude of resources which form the foundation upon which the South is building for the future. The review reflects great credit upon the MANUFACTURERS' RECORD, and it is but illustrative of the great work which the publication is doing in accelerating the upbuilding of the South.

[Raleigh (N. C.) News and Observer.]

The industrial progress of the South for the past few years has been the marvel of the world. The Southern people, busy in developing their resources and conscious of that going forward attendant upon well-directed energy, do not themselves realize the progress they have made. In the last issue of the MANUFACTURERS' RECORD Mr. Richard H. Edmonds has presented a comprehensive statement, which he has put in a handy pamphlet called "Facts About the South," that tells a story that will bring pride to every Southern man and woman and will attract the attention of the men with money, brain and muscle throughout the world. In it the whole story of Southern material upbuilding, the romance of the South's redemption from poverty to prosperity since 1880 and the resources of this section in coal, iron, timber, phosphates, cotton and other wealth-producing resources is more comprehensively dealt with than ever before. The prosperity of the South before 1860, and reasons therefor, so slightly known and understood by the general public, are brought out very clearly in explanation of the business and industrial energy of the Southern people today and as convincing proof of the natural advantages which were rapidly making the South the richest part of the country when the war intervened. * * * This work of Mr. Edmonds is easily the most important contribution made in this decade to the industrial development of the South. The world of capital and labor is interested in the South. So much misinformation is afloat that the South has not received its due share of capital for investment or of immigration to cultivate the idle acres. Every paper, public speaker and the public-spirited man in the South has added to the accurate information, but most of it has not been in such form that it could

answer the needs. Mr. Edmonds, with infinite labor and research, added to the study of a lifetime and a genius for presenting Southern facts in their true light, has put into a single handy volume almost every fact that illustrates the South's progress and the advantages which the South offers to investors, homeseekers and laborers. In doing so he has put the whole South under lasting obligations and will receive the thanks of all who are interested in the development of every section of the republic. "Facts About the South" will be widely read, and should find a place in every library and in the office of every business man. To an editor it will be invaluable—a *vaude mecum* that will be consulted every day.

[The Gazette, Pittsburg, Pa.]

Much is owing to the spirit infused into the Southerners by the coming of workmen and capitalists from the North, but the splendid showing of progress made by the South is due in as great a measure to the new vigor the Southern people have taken on. The most eloquent exposition of the rise and advance of the Southern States is given in a brochure by Mr. Edmonds, editor of the MANUFACTURERS' RECORD, entitled "Facts About the South." Some of his figures are most surprising.

[Evening Chronicle, Charlotte, N. C.]

The story of the industrial and agricultural advance in the South since 1880 and of the material resources upon which Southern progress and prosperity are based is given in the MANUFACTURERS' RECORD of Baltimore this week. It covers 20 pages. In this particular issue of that paper as a whole are good examples of what the MANUFACTURERS' RECORD is doing every week. We do not believe that any thoughtful man in the South can be otherwise than interested in a close acquaintanceship with what this section is doing and what it may accomplish. The facts bearing on these questions touch the life of every man and woman in the South, and never before were they so comprehensively presented as in this special article.

[The Herald, Washington, D. C.]

The MANUFACTURERS' RECORD presents, with all the wealth of astounding figures which characterizes any account of industrial or commercial progress in this country, a review of Southern prosperity that is suggestive to the student of economic influences on social and political development.

[The News, Lynchburg, Va.]

It is in this inspiring fashion that the MANUFACTURERS' RECORD of the 9th inst. concludes an exhaustive and instructive review, covering more than 16 pages, upon the development of the industrial and agricultural South during the past quarter of a century. Besides, our contemporary embodies with its gratifying retrospect an encouraging consideration of present conditions in this section, together with a stirring and enlightening forecast of its future. We have yet to see a more valuable narrative and treatise bearing upon the yesterday, the today and the tomorrow of a great industrial empire than that furnished by our esteemed Baltimore contemporary in this instance.

[The Journal, Henderson, Ky.]

To say that these facts about the South are startling in their significance and amazing in the cumulative evidence they bring of deep-seated and actual resources is to speak with studied moderation. After reading the little book we can affirm our unqualified belief in its author's statement. He has compiled and packed together in less than 70 pages much that

every Southerner ought to know, and more that is known to very few. There it is in form easily accessible, classified and tabulated and set forth concisely and with cogency. He calls it a "plain statement," but if it were a romance it could not be more inspiring nor more encouraging.

[The Observer, Charlotte, N. C.]

Not least interesting among the features of Mr. Richard H. Edmonds' article upon Southern prosperity in the current issue of the MANUFACTURERS' RECORD is a showing for the antebellum South which must amaze those who have been misled into regarding it as deficient in energy. Few or none can be found to question that no other country within an equal period of time has ever surpassed the old South in producing soldiers and statesmen, but too many, even among those who should know better, have acquiesced in the mistaken notion—born chiefly out of the strivings of orators and writers for dramatic effect—that it was otherwise indolent and inefficient.

[The News, Chattanooga, Tenn.]

We doubt if a more important piece of work has been done for the South in 10 years than this. It will open the eyes of the civilized world to the riches of the South at present and the prospects for the future. It will invite capital, encourage home enterprise and make for our general prosperity. The article in its entirety should be printed in pamphlet form and circulated at the expense of the Southern States. Tennessee, Alabama and Georgia could well afford to invest in such an enterprise, because the article contains much of special interest to these States.

[The News, Charlotte, N. C.]

Probably there is no man more conversant with the general lay of the land in the South than the brilliant editor of the MANUFACTURERS' RECORD. Mr. Edmonds is a walking bureau of information, a creature of figures. In this week's issue of the MANUFACTURERS' RECORD he has compiled the story of the South's progress in a manner altogether startling. * * * It is well-nigh impossible to comprehend the immensity of the figures recorded by Mr. Edmonds. However, an idea of what is going on in the South may be obtained which must fill the heart of every true Southerner with pride.

[Houston (Texas) Chronicle.]

The service that Mr. Edmonds has done the South by this pamphlet and his work in the MANUFACTURERS' RECORD is very great. Business men, capitalists and financiers at home and abroad, manufacturers, statesmen, students of economics and industrial development have had their attention directed to this section to its benefit by the unadorned tale of its "wonderful progress and prosperity," which Mr. Edmonds is forever telling, tirelessly gathering the facts and figures and setting them forth in the clearest form for the information of all the world.

[Age-Herald, Birmingham, Ala.]

The busy men of this section of the country—of the entire South—are indebted to Richard H. Edmonds, editor of the MANUFACTURERS' RECORD, for a compact story of Southern accomplishments in the past 26 years in agriculture, in manufacturing, in mining, in transportation, in trade and in commerce. The busy man has no time in which to survey and sum up the past, and Mr. Edmonds, who is an expert in Southern facts and figures, has done the work for him in fine style, without at any point overstepping the bounds of truth. * * * This story of the South was first printed in the MANUFACTURERS' RECORD, but it has also been

put into pamphlet form for general use and circulation. In this form it should be in the hands of every leader of thought or business in the South.

[Harrisonburg (Va.) *Daily Times*.]

We repeat what we have had occasion to say several times before, and that is that the people of this country, but especially of the southern part of it, are greatly indebted to Mr. Edmonds and his excellent publication, the *MANUFACTURERS' RECORD*, for the persistent, forceful and able manner in which the development of the natural resources of this part of the country has been urged upon our people. For a quarter of a century the *MANUFACTURERS' RECORD*, week after week, with tireless energy, devoted its columns to the development of this part of our country, and he deserves much credit for his great work.

[Austin (Texas) *Statesman*.]

The progress of the South since 1880, as recorded in that great Southern industrial journal, the *MANUFACTURERS' RECORD*, reads like a story from the "Arabian Nights" rather than a history of industrial development. In nearly all pursuits that tend toward commercial and industrial greatness the record of the last quarter of a century shows that the South has led all sections of the civilized globe, and the statistics for last year are little short of phenomenal in so far as they relate to the important question of the manufacture of our raw materials, and most especially cotton.

[Galveston (Texas) *News*.]

Mr. Edmonds, through his highly useful publication and in other ways, has been one of the most energetic and intelligent workers in the wonderful development of the South which has taken place in recent years. This last contribution, "Facts About the South," is one of the best of all his good works, and comes at a most opportune time for Texas and other States of the South.

THRIVING BALLINGER.

Rapid Development in the Twenty-One Years of Its Life.

[Special Cor. Manufacturers' Record.]
Ballinger, Texas, May 15.

Runnels county, created in 1853 and organized in 1879, derived its name from ex-Governor Hardin R. Runnels of Texas. Runnels City, located within three miles of the geographical center of the county, was its first county-seat. Upon the advent of the Gulf, Colorado & Santa Fe Railroad, from Temple west through this section of the country in the first part of the year 1886, Ballinger, five miles south of Runnels City, between the forks of Elm creek and the Colorado river, was laid out by the railway company. Here was another exemplification of what the railroads of Texas have done and are doing for the upbuilding and promotion of Texas along practical lines. The people of Ballinger welcomed the incoming of the iron horse, and have up to today worked in harmony with the railroads in the development of this section of Texas.

The original date of the sale of the town lots of Ballinger occurred on June 29, 1886, which now makes this thriving town nearing her twenty-first birthday. Her growth has been phenomenal—from a town of a few tents to a thriving village approximating 5000, and all this in a period of 21 years.

Ballinger boasts today of 120 good substantial rock-built business houses, doing credit to a city five times the population of the city. Ten to twelve new business houses are now under course of construction. Ballinger has a \$40,000 courthouse of

most pleasing architecture, \$15,000 jail, a large and commodious school building accommodating 1300 children, eight denominational churches, an excellent water-works system, telephone system, electric-light plant, ice factory, two bottling works' plants, \$40,000 cotton compress, \$100,000 oil mill, \$50,000 flouring mill, besides \$75,000 invested in other manufacturing plants and devices, three banks, two national and one State, and combined individual deposits of \$1,750,000.

Ballinger received by wagon for the season of 1906-1907 40,000 bales of cotton, representing something over \$2,000,000 which has been paid out to the farmers of this county. In few sections of Texas are the farmers so well off in worldly goods. They are free from debt, and many of them have their large balances on deposit in the village banks. An air of general prosperity prevails. Indications of the remarkable growth of Ballinger during the past several years are not given in the continued growth of the town proper, but throughout the county as well by handsome country homes, commodious and well-built barns and splendidly kept-up farms. Thousands of acres of unimproved land are to be had in the county at prices ranging from \$15 to \$20 per acre; improved lands at prices from \$25 to \$35 per acre, and on reasonable terms. The soil is adapted to growing wheat, oats, rye, barley, millet, sorghum, alfalfa, cotton, corn, fruits, melons, etc. It is an ideal section for German and Swiss farmers coming to this country looking for a section where farming pays. The healthful climate, with pleasant summers and mild winters, is a great attraction in the growth of Ballinger.

To give some idea of the healthful growth of this section, your correspondent was reliably informed that the taxable values in 1892 were \$2,000,000, in 1907 \$7,000,000, showing an increase in 15 years of \$5,000,000.

With the incoming of capital employed in the erection of factories there will be given a greater impulse in the growth of Ballinger along all lines of human endeavor. It is predicted by safe and sane men in Ballinger that in the next five years this healthful and robust village of a present population of 5000 will more than double itself, not only in inhabitants, but in all the avenues of thrift and industry which makes material advancement in the building up of a city.

To the local press much is due to the advancement of Ballinger. It is the potential lever in everything pertaining to the progress and advancement of the city.

Messrs. C. A. Dooze & Co., real-estate loans and abstracts, are reliable men to consult with regarding realty values in this section. They are walking encyclopedias on the cost, value and prices of city property, farm or ranch lands. Mr. C. A. Dooze, one of Ballinger's most enterprising and respected citizens—a man who gives freely of his own means in any development project—stated to your correspondent:

"All indications point strongly to Ballinger's growth, not only along present lines, but in matters of far greater import of which I am reliably informed, causing the inflow of outside capital in the further promotion of those industries which have been tried and not found wanting. In the next couple of years you may count on Ballinger assuming that proud distinction, of which she is by nature so greatly favored, as one of the most thriving industrial and commercial centers in this section of Texas. All indications point strongly that way, and knowing the pulse of our people, as I do, I feel certain of an industrial impulse which will place Ballinger in the lead and front rank of her

sister cities and villages in all the channels of productive wealth and enterprise."

Surely here is a town in Texas well worth the watching by people who have an eye to the windward in the judicious investment of their capital in channels which must of necessity give good returns, as present as well as past indications have so strongly foreshadowed.

ALEXANDER HELPER.

EASTERN KENTUCKY TOWNS.

Reflecting Industrial Development of Their Section.

[Special Cor. Manufacturers' Record.]
Barboursville, Ky., May 20.

Many towns in the rapidly-developing sections of Eastern Kentucky are coming to a realization of the benefits accruing from progressive commercial organizations, and during the past few weeks a number of commercial clubs and boards of trade have been organized to present the resources of the various sections to the world at large and to attract capital for commercial and industrial developments.

The Barboursville Commercial Club has been organized with Judge F. D. Sampson, president of the First National Bank, president; Mayor Robert W. Cole, vice-president, and D. W. Clark, editor of the *Mountain Advocate*, secretary. Practically every business man of the city is on the club's register.

The Somerset Commercial Club was organized last week, and contains on its list of members several hundred business and professional men of that city. A concentrated effort will be made to boost that section's interests.

The Danville Commercial Club has been organized, and is doing good work in advancing the interests of that city. A commercial club has also been organized at Williamsburg during the past week.

Eastern Kentucky is now making amazing strides in the development of its natural resources, and the various towns and cities are showing an unprecedented growth as a consequence. The opening of coal mines, building of railroads and other industrial undertakings have created a scarcity of labor, and from all over this section of the State there is a great demand for laboring men.

Private and public buildings now being constructed here represent an aggregate outlay of several hundred thousand dollars. Barber & Klutz, Knoxville architects, have been awarded the contract for erecting two new buildings at Union College to cost \$50,000.

The fiscal court of Knox county at its last meeting in this city appropriated funds for the building of 11 modern bridges in various sections of the county. Several will be of steel. The court also appropriated \$18,000 for the building of a macadamized turnpike from this city to Clay county. No contracts have been let on any of these public undertakings.

At Somerset a modern street-railway system is a development of the past year. The location of the Cincinnati Southern shops at Somerset has increased the population of that city several thousand during the past two years. The Somerset Commercial Club will set forth the advantages of that city in attractive shape in an endeavor to secure factories which will furnish markets for the various natural resources of that section.

An undertaking that will have a great effect on the future growth of Somerset is the building of the Cumberland River & Nashville Railroad, a line designed to extend from Corbin, Ky., to Nashville, Tenn. During the past week three working forces have been placed on the first 20 miles of this line. The construction of this link will connect Somerset with an extensive

undeveloped section which contains the most extensive high-grade oil field in the South. The first 20 miles of the Cumberland River & Nashville Railroad will extend from near Somerset to Monticello, Wayne county.

During the summer probably \$200,000 will be expended at Danville, where the Commercial Club is boosting things with all its power. Three new buildings to be erected for Central University will cost \$100,000, and the erection of new buildings for the new Kentucky Female College will represent an expenditure of \$80,000.

The Wheat Heart Manufacturing Co. is a cereal manufacturing company that has been induced to locate at Danville through the efforts of the Commercial Club. Mr. James A. Currie, Danville, Ky., is manager of this concern. W. S. HUDSON.

ACTIVITY AT DANVILLE.

Industrial Establishments and Business Houses Enlarging.

[Special Cor. Manufacturers' Record.]
Danville, Va., May 16.

Knowing that you are interested in the progress of every city in the South, we write to give you a few facts about our historic city on the Dan.

Our tobacco crop of 1906 has been largely sold, and at a much better price than for several years past.

Danville, as you know, is the largest loose-leaf market in the world, and our year ending August 31 will close with our selling close on to 50,000,000 pounds.

The Morotock Manufacturing Co., one of our enterprising concerns, manufacturers of workmen's garments, is in the midst of putting up a \$30,000 building, which, when completed, will give employment to 350 people.

S. A. Schloss of Wilmington, N. C., is at the present time building a \$35,000 theater, and in the course of the next 30 days active work will be started on our \$40,000 Y. M. C. A.

The Noell-Anderson Manufacturing Co. has just completed a \$15,000 building, and this company proposes to greatly increase its already well-established business. It manufactures tables, desks, etc.

The city of Danville is spending \$40,000 additional on its gas plant, which work will be completed shortly.

There are numerous other smaller business houses going up here, also many handsome residences in the course of completion.

Our jobbing and wholesale trades report having had a most satisfactory business since the beginning of 1907; in fact, there are marked signs of prosperity on every side in Danville.

I could go into detail, could mention numerous manufacturing and business houses that have been compelled to enlarge their different places by reason of increased trade, although you can judge from the above that we are moving along in a very satisfactory manner.

W. C. RIERSON, Secty. and Treas.
The Commercial Association.

The executive committee of the Interstate Inland Waterway Association will meet at Beaumont, Texas, June 13 to arrange for the annual convention of the association in October. The committee is composed of the following: Texas—C. S. E. Holland of Victoria, Robert A. Cowart of Dallas, James B. Baker of Waco, C. A. Sumners of Cuero, Hugh Jackson of Beaumont, G. J. Palmer of Houston, Walter Gresham of Galveston and Royall Givens of Corpus Christi. Louisiana—Henri L. Gueydan of Gueydan, S. Locke Breaux of New Orleans, E. A. Pharr of Morgan City, Walter J. Burke of New Iberia, E. P. Munson of Napoleonville, C. C. Duson of Crowley and Leon Locke of Lake Charles.

TURNING SWAMPS INTO GARDEN SPOTS.

[Special Correspondence Manufacturers' Record.]

New Orleans, La., May 18.

Coming into New Orleans over any of its railroads one rides through a wide waste of swamp lands, those along the coast salt marshes extending for some distance inland, but others, such as the Southern Pacific passes through, simply wet prairies, where the rainwater stands in saturated soil close to the surface of the earth, not running off because there are no streams adequate to drain the surplus water away. The superficial observer is likely to give but a passing glance at what appears to be merely a monotonous landscape. If discussed at all, the opinion is likely to be heard from Louisianians themselves that these are worthless wastes which would not justify the cost required to drain them and put them in shape for cultivation. To those who have given the subject of swamp-land drainage any consideration at all, however, there comes the impatience that one feels on seeing great opportunities neglected, for ample demonstration right in this vicinity has been made that not an acre of these water-soaked lands is less fertile and productive when properly drained than are the lands of Holland and other ditched and dyked sections, where \$300 to \$600 an acre is the ruling price.

Much comment was occasioned when not long since Mr. James J. Hill pessimistically spoke of the rapid increase in population in this country and expressed a doubt that there would be sufficient room here to raise the foodstuffs to sustain the 200,000,000 people he predicted the country would contain 50 years from now. Mr. Hill apparently spoke in all seriousness, and his commentators, too, were generally inclined to take his gloomy picture seriously. How anyone who goes over the country as Mr. Hill does, who sees that there is a mere fringe of population along the railways and watercourses clean down to the Atlantic seaboard, can really feel apprehensive of a greater population for centuries to come than the country can raise foodstuffs for I am wholly unable to understand. As a matter of fact, improved methods of farming already introduced and in operation in many places would almost, when universally applied, double the productiveness of the acres now in cultivation in the United States.

All over the South, leaving out of consideration any other section, a vast area is being added to the total of farming lands by the restoration of farms which had been rendered temporarily useless by the shiftless tenant system following as an inevitable consequence of the war and the liberation of the slaves. By the use of fertilizers—and the South, controlling the phosphate fields, thus controls the commercial fertilizers of the world—and by the use of cowpeas, vetch, clover and alfalfa the soil of those Southern farms is being restored to its virgin fertility. Throughout the South alfalfa—which, like cowpeas and similar plants, is a great enricher of the soil—is not only benefiting the soil itself, but it is yielding a profit of from \$50 to \$75 an acre. Mr. E. S. Peters of Texas, one of the foremost cotton planters of that State, who formerly cultivated 1000 acres a year in cotton, lately stated that he had put half of his land in alfalfa and was making a net profit of \$50 an acre, which was far beyond what he could do with cotton in the best seasons. One of the foremost farmers of Mississippi, while attending a convention in Washington a short time ago, said he was giving his attention to alfalfa, and that he would not return to the old one-crop cotton system, even if guaranteed a price of 20 cents a pound.

But outside of the restoration of the old farm lands, which will enormously increase the productive capacity of the South, there are millions of acres of swamp lands capable of being drained and put in cultivation, which are not excelled in fertility by any lands on the earth. A recent newspaper writer estimated that there are 50,000,000 acres of swamp lands in the Mississippi valley and in States to the east that are susceptible to reclamation. This is a conservative figure, no doubt, but accepting it as the basis of a calculation, consider the millions who would find sustenance for themselves and foodstuffs for many added millions who would buy in the markets they would supply.

The whole subject of reclamation is one, it seems to me, that should engage the attention of the people at large, for even if one disputes with Mr. Hill that the time is at all near when America will be overcrowded it is a national necessity that lands so near the populous centers, and so fertile when reclaimed as these are, should be put in shape to be cultivated. Doubtless, when fully reclaimed, these lands would be easily worth \$100 an acre, or \$5,000,000,000. This is about three-fourths—80 per cent., to be exact—of the present assessed valuation of property in the whole South, and more than one-third of the total investment in all the railroads in America. On 50,000,000 acres of such land the net profit on products ought certainly to be \$20 or \$30 an acre per annum minimum, or a billion dollars or more every year. Surely this is a prize great enough to enlist the active work of all the people.

While wonderful transformations have taken place on the arid lands of the West since the Government began its vast irrigation projects there, many times greater possibilities exist in the reclamation of the overflowed swamp lands of the South, where many million acres, the richest in the world, could be reclaimed, yielding to the country a far greater profit than can ever be secured by the millions now being expended in the irrigation of the Western deserts.

By spending a few millions dollars the United States can reclaim enough land along the Mississippi river now valueless to duplicate the entire cotton crop of the South. It has been proven that there are 30,000 square miles capable of yielding indefinitely without fertilization a bale to the acre, and even allowing for only one-half of it to be in cultivation at any one time, there would still be land enough to give 10,000,000 more bales of cotton than the South is now producing. Considering the amount to be expended, this is probably the most gigantic investment opportunity ever given to any country in the world, for this 10,000,000 bales of cotton would mean an annual addition of \$500,000,000 to \$600,000,000 to the value of the South's agricultural production.

It seems almost incredible that conditions here have not been more generally discovered, understood or appreciated, whichever the proper term may be. All around New Orleans there are hundreds of thousands of acres that can now be bought for a ridiculously low price, considering the small expenditure required to make them immensely valuable, and yet I have heard of but few men who are fully appreciative of the opportunities that present themselves. About the only conspicuous instances that come to mind just now are Edward Wisner, who owns large tracts of swamp lands and is at work on reclamation plans; Col. J. H. Gheens of Kentucky, who has reclaimed large tracts of swamp

lands and demonstrated their remarkable productiveness, and Henri L. Gueydan, who further toward the coast has also gone extensively into land reclamation enterprises. Mr. Wisner has told me he intends to make land reclamation his life-work. He, with O. W. Crawford, has organized a company, the Truck Farm Land Co., which is selling to farmers small tracts of drained lands in the vicinity of Paradise, St. Charles parish, and he also proposes to systematically interest in his other swamp lands people who will further the work of reclamation.

Individual enterprise, however, makes slow headway compared with what could be done by a governmental plan of reclamation, and there is a probability that the importance of the Government taking hold of the work will be laid before Congress this winter. Outside of the importance of the work and the fact that without federal action the work will not be undertaken on a broad plan—the effective argument in the arid lands enterprise—there is a further reason why the Government could with propriety do the work. The Mississippi river, levied horse high through Louisiana, not only affords no outlet for the streams that would naturally flow into the

river, but effectually prevents the drainage of the adjacent lands. Of course, there is no disposition here to assail the levee system; it is only to point out that it affords protection against the floods, while by that very office it shuts off drainage. The States to the north get the drainage benefit, and drainage in Louisiana being thus rendered a quasi-national matter, it is urged that the national treasury could with the utmost propriety bear the expense of a complete drainage system here.

In the reclamation and improvement of these lands, the canals which would take the place of streams would provide cheap transportation both by water and by road. The canals would afford navigation, and the earth thrown out of the canal would make the roadway. Thus, when reclaimed, the country will be a network of canals and good roads.

What Holland has so remarkably well done with infinitely less to start with I believe the South will somewhere near attain in time. Ultimately she should surpass anything the world has seen. For where else has there ever been soil 1000 feet deep with location such as this?

ALBERT PHENIX.

THE TRANSPORTATION CRISIS—VIII.

By LEWIS M. HAUPT.

[Written for the Manufacturers' Record.]

In its progress from the forest, farm, mine or mill to the market or consumer every ton of freight must traverse one or more of the three media—roads, railroads or rivers. Fluids may be made to transport themselves by gravity through pipes or other conduits, but there is a distinct relation existing between these several avenues of trade which has evidently not been fully understood nor appreciated by those most deeply interested in the conduct of transportation as a business, and which for many years has served to retard the best interests of the public.

This paradoxical condition has arisen from the belief that a competing water route, capable of transporting freight at lower cost, was a dangerous competitor, to be exterminated at whatever cost, so that the canal and waterway have been made the object of a war of extermination and elaborate arguments have been published by technical journals claiming that the railroads could deliver freight more expeditiously and cheaply than the waterway.

The functions of the carrier are to deliver freight by the line of least resistance, time and cost considered, and if the path of any commodity be traced it will in general be found to have been transported over the common road to the railroad, thence to the mill or factory, thence again to the warehouse or market and thence to the consumer at home or abroad, so that the cost of movement on all of the media constituting the way will enter into the final charge, in addition to many other factors. It may not be borne by any one alone, as they are mutually dependent. If the haul by wagon over steep and poorly-surfaced roads is long, the cost per unit may exceed 25 cents per ton-mile and there may be nothing left for the extension of the movement, whereas if, on the other hand, the initial or final movement be by water at a rate of a fraction of a mill, the margin for extending the market range will be greatly increased and the value of the product, as well as of the source from which it was obtained, will be largely augmented. It is likewise manifest that if water can be substituted for rail or road, even at the expense of one or more transshipments, it may be found more advantageous. Shippers are not slow to take advantage of the rate rather than the time, so that goods are frequently sent from the factory to the nearest seaport, and thence by a circuitous water route, with several transshipments, to avoid a long overland haul; in fact, goods have been sent from England to New York and back to London for less cost than the charge across country, so low were the ocean rates at the time. Thus a consignment of pottery was intended to have been shipped in two parts from Tunstall to London, 148 miles, but through an error of the clerk one crate was forwarded to New York and thence back to London by water at a cost of only 15 shillings per ton for the entire 6750 miles, while the charge on the other overland shipment was 25 shillings per ton.

In this connection, and as an illustration of the wisdom of the policy which has built up one of the greatest railroad organizations of the world, it may be expedient to introduce a few extracts from a personal communication to the president of the Pennsylvania Railroad by its general superintendent, dated November 17, 1853. It is addressed to J. Edgar Thompson, president, and reads as follows:*

Railroad Policy Outlined.

"Dear Sir: * * * I consider that the great objects of the construction of the Pennsylvania Railroad were to build up the city of Philadelphia, to promote the increase of trade and the general prosperity of the State, and at the same time to pay fair dividends to the stockholders.

"I consider from 8 to 10 per cent. a fair dividend, and this may be earned either by a small business at high rates or by a large business at low rates. If the company should refuse to carry a pound of ordinary freight and confine their business to passengers and express, I believe that dividends of 8 per cent. could be paid, but such a policy would be injurious in the extreme to the commercial interests of Philadelphia, which require that every possible facility should be afforded to trade and every effort made to bring upon the road the largest business it can accommodate. To secure these

*This letter was found among the effects of Herman Haupt, chief engineer Pennsylvania Railroad.

advantages a system of low charges upon articles of great weight and little relative value is indispensable. In a word, the motto of the company should be a *large business, low rate and fair dividends*. But until the road is double-tracked the low rates must be limited to articles carried for "back-loading" or at the convenience of the company.

"When a road is in condition to accommodate an increased tonnage the profits resulting from it must not be estimated by charging this business with an average of the expenses, but only with the increase consequent upon its carriage. * * * [Here follow statistics to illustrate.] * * * From these results I am led to conclude that this company, with a double-track road, under one management, could transport coal at a cost of about one-half cent per ton-mile without actual loss, and lumber at nine mills per 1000 feet, and that a charge of one cent per ton per mile on an increased business of 500,000 tons carried 200 miles would pay a net profit of 5 per cent. on \$10,000,000, furnishing a most desirable increase to the revenues of the road, if we were in position to accommodate it, which, of course, we shall never be while that incubus, the State tax, continues.

"But even if this business did not pay a dollar of revenue, my opinion is that it would be to the interest of all parties that it should be accommodated, as it would give employment to a large population and stimulate many other important interests. * * * It should be observed that even if low rates be permanently fixed upon coal and lumber, it would be a year or more before the stimulus of this reduction could lead to a sufficient increase to embarrass our transportation, by which time we could be prepared for it.

"Under the influence of such opinions, I have encouraged those who have consulted me to invest capital in coal and lumber operations and to make extensive improvements. So clear to me did the true policy and interests of the company appear that I could not suppose it possible that a different view would be taken by those who would have the management of the traffic. The existing policy is calculated to reduce the business within very narrow limits.

"This letter has been written not as an officer of the company, but as an individual. I have, as you know, no connection in any way with transportation or regulation of tolls, and therefore could see no impropriety in defining my position and in giving expression to my opinion." * * * Thus more than 50 years ago the analysis of the traffic for the first year after the opening of this great railway through to Pittsburg showed that it was one of enormous possibilities under the policy as then outlined, although the management was not convinced at the time of its expediency. The tonnage then did not exceed 160,000 tons, and the average haul 170 miles. The ton-mile rate was about 5.7 cents, as compared with about 5.5 mills in 1905, when the traffic east of Pittsburg and Buffalo was 156,533,351 tons, or nearly 1000 times greater.

In the light of the actual facts it is worthy of note that in 1853 the chief engineer presented an urgent plea to the directors for the acceptance of this policy of low rates, predicting that in a short time it would develop a traffic of 1,000,000 tons, which it would require 300 freight engines, costing \$2,500,000, to transport, and that the net earnings of the road would be greatly increased thereby. It was not, however, until some years later that the accuracy of these predictions were realized, as they were demonstrated by experience, and the low-rate policy became fully adopted.

The Eastern division, extending from Harrisburg to Hollidaysburg, at the foot of the Portage Railroad, was 136.7 miles long, and the Western division, from Johnstown to Pittsburg, 78 miles; total, 214.7. They were built at an average cost of \$33,000 per mile, while the Mountain division was estimated to cost \$60,000 per mile, exclusive of equipment. The estimated cost of the whole road with a double track was \$13,635,000. (See Annual Reports for 1852-53.)

Railroad Regulation.

From these incipient stages the railroads have grown into the greatest single industry in the country, which, by a process of elimination and concentration, has acquired so great wealth and power as to have almost passed the safety limit between servant and master.

The vital question is no longer one of traffic, wherewith to meet operating expenses, for the roads are engorged with tonnage which cannot be promptly handled; but for capital with which to provide additional tracks, terminals and storage, if they may be had at any price, and to this end it must be shown that this class of investment is at least as safe and profitable as any other, so that the additional loans required for betterments may be readily sold in open market without being baited with watered stock. This result cannot be secured by additional legislation, of which there would seem to be a plethora already, except so far as it may be required to check the discriminations, rebates, special privileges and parasites which prey upon the revenues derived from income, and to this extent serve to aid the management as well as to secure greater protection for investors in railroad securities. The average dividends paid on the entire capital of the roads of the United States, being only about 3 per cent., are not in themselves sufficient to tempt investment, even in bonds, much less in the stock of such corporations.

As previously stated, no general legislation can be framed which will meet the ever-varying conditions of railroad traffic in this broad country, where every road must have sufficient latitude to regulate its own details according to local conditions and environments, but the best that can be done is to place reasonable checks upon the various forms of evil which have to a large extent impaired confidence in the wisdom, if not in the integrity, of the management and enabled the officials of large properties to acquire enormous fortunes by the manipulations of their securities, which under other circumstances would have gone to the public or to the security-holders.

But the best regulators of rates and producers of income are the waterways which parallel the railroads, and the deeper and larger they are made the better. Yet these large channels permit the construction of larger vessels, with still cheaper tariffs, which would appear to militate against the overland rates, but which, in fact, merely relieve the railroads of the basic raw materials required by the industrial centers, thus giving to manufacturers a greater margin for the extension of their margins for their products and enabling the railroads to increase their revenues from the higher class of freights.

This law has been so oft repeated of late years that it seems trite to even mention it here, but a single illustration may serve a purpose.

Benefits of the Manchester Canal.

The Manchester district of England was so crippled by the gradual extinction of the early canals and the high rates imposed by the railroads, as well as by the port charges at Liverpool, some 35 miles distant, that the district concluded to open a

26-foot canal to the Mersey and thus connect with the sea. This project was bitterly opposed by the existing vested interests, both in and out of Parliament, but the energy of the projectors and the continued distress of the district finally prevailed, and the canal was built at a cost of about \$75,000,000 and opened for traffic in 1894. Anticipating this, the railways had discounted the trade by making long-time contracts at low rates, so that the indirect benefits became at once manifest, and the 13,000 empty mills and dwellings began to fill up, and within the 10 years following not only were they all reopened, but as many more were built, while the docks and terminals were enlarged and the canal itself deepened two feet at an additional charge of about \$10,000,000. In 1903 the net revenue was nearly \$1,000,000. The indirect benefits of these improvements are far-reaching and impressive, extending to the five lines of railway and the port of Liverpool, as well as to the entire district, covering a population of nearly one-fourth of the kingdom. All of these changes are directly attributable to the enterprise of the corporation of Manchester and vicinity in financing this great work and pushing it to a successful issue against the most vigorous opposition and many physical difficulties and reverses.

The indirect benefits become at once apparent by noting the saving in the cost of the following items, amongst others, effected by the canal: The saving by the canal on one ton of cotton was \$1.66; on sugar it was \$2.81; on tea, \$2.40; on bacon, \$2.10; on canned meats, \$2.35; on wheat, \$1.77; on petroleum, \$2.12; on tallow, \$1.91; on timber, \$1.16; on wool, \$2.16; on iron ores, \$1.02—giving an average on these low-grade staples of about \$2 per ton. Applying this saving to the present tonnage of the canal, it would represent an indirect economy to the people of the district of over \$10,000,000, or more than 13 per cent. on the \$75,000,000 of cost, thus fully justifying the enterprise, regardless of the returns from freight and the great improvement in the general business of the railroads and the entire district, including the rival port of Liverpool.

Canals Under Control of Railroads in Great Britain.

The effect upon the traffic and returns of canals under management of railroad corporations in general may be seen from the returns of the Board of Trade of Great Britain, which stated that in 1898 there were 2768 miles of independent canals, having a traffic thereon of 33,348,573 tons per annum, producing a net revenue of \$1080, and, per contra, there were 1138 miles of canals under railway control, having a traffic of 6,009,820 tons per annum, yielding a net return of only \$200 per mile, from which it appears that the independent canals carried 12,048 tons per mile, as compared with 5281 under railroad management, and that the returns by the former were 5.4 times greater per mile than by the latter, so that the public received a much larger service and the security-holders a greater net return from the canals under independent control than from those held under the rail management.

In the United States.

The same conditions appear to exist in this country where the two kinds of transportation are under one management, as is clearly shown in the case of the Camden & Amboy Railroad and the Delaware and Raritan Canal of New Jersey, consolidated by what was known as the "Marriage Act" of February 15, 1831, requiring both the railroad and canal to be built simultaneously and to be operated by the same board of directors. In 1832, the first year in which the railroad was opened, the passenger business was about 52,000, and the comparative traffic of the competing routes under the same management was as follows:

| Years. | Tons. | Freight on rail. | Tons. | Freight on canal. | Passengers on rail. |
|-----------|---------|------------------|-----------|-------------------|---------------------|
| 1835..... | 6,875 | | 57,736 | | 147,424 |
| 1840..... | 11,325 | | 172,120 | | 153,112 |
| 1850..... | 42,242 | | 668,403 | | 345,425 |
| 1860..... | 153,750 | | 1,639,993 | | 479,339 |

From which it appears that the canal tonnage exceeded that of the railroad by from 8 to 15 times its weight, and it continued to increase until 1866, when it reached its maximum of nearly 3,000,000 tons. In 1868 the canal transported 2,519,285, and the next year 2,547,212, but on the 30th of June, 1871, it was leased to the Pennsylvania Railroad Co. for 999 years, with its interest guaranteed at 10 per cent., and immediately the traffic began to fall, so that today it is far from paying operating expenses, although it earned over 20 per cent. net prior to the lease. It is thus indefinitely tied up as an element in interstate commerce.

In this connection it may be well to observe that in a prior lease made as early as 1837 it was proposed to prohibit the carrying of passengers or baggage on the canal, but this lease never went into effect. Later, when in the 50s the National Government contemplated the building of a national military railway across New Jersey, the directors petitioned the State not to permit "such an encroachment upon her sovereignty and the destruction of an important pecuniary interest, as no such necessity existed." This protest was renewed two years later, or just prior to the Civil War, when the importance of the coastwise waterway was so forcibly demonstrated by the use made of the Chesapeake and Delaware Canal in forwarding troops and stores to protect the capital. These canals still remain in the same condition as then, so far as capacity is concerned, for the Government has done nothing to relieve them from tolls nor to enlarge them for commercial or strategic purposes. Thus this most populous section of the interior coastwise canals and rivers remains throttled by the lack of enabling legislation which has been pending for nearly 40 years, as has been so well set forth in the timely and forceful paper of Representative J. H. Small of North Carolina in the MANUFACTURERS' RECORD of March 21 last.

Another instance of the paralyzing influence of hostile control is to be found in the experience of the Schuylkill navigation, opened in 1825 from the anthracite coal regions to Philadelphia, a distance of 108 miles, for bateaux of 25 tons. It was enlarged to pass boats of 80 tons in 1832, and was doing such a prosperous business that its securities were quoted at 3½ times their face value. The competition with the Reading Railroad began in 1842, and soon became so desperate as to require an enlargement of the waterway for boats of 170 tons and the reduction of the number of locks from 120 to 71, involving heavy expenditures, which were made in 1846-47. These were followed by a disastrous flood in 1850, which destroyed a part of the works and placed the company in an embarrassed condition, forcing it to liquidate in 1852, when its debts were \$10,260,000. The new company continued the struggle against the cut rates of the railroad, but the canal finally capitulated and the railroad secured control of the works by leasing them for 999 years at an annual rental of \$665,000, after which the tolls were increased about \$1 per ton. This lease went into effect in 1870, and the tonnage began to dwindle away from the water. In 1880 it was 706,000; in 1890, 182,992, and in 1900 about 58,000 tons. The receipts had fallen from \$573,133 in 1880

to \$102,012 in 1900, or far below the guaranteed interest, which would entail a loss on the company unless the additional charge over and above the rail haul were collected from the public to cover the extra cost of transportation and this interest on the shares, which were purchased chiefly by the railroad company. As the works must be maintained by the lessee, it would seem that neither the railroad nor the public are benefited by this contract. It is believed this condition could be modified to advantage.

Interstate Cottonseed Crushers' Convention.

[Special Dispatch to Manufacturers' Record.]

Jamestown Exposition, Va., May 22.

The largest gathering of representatives of the cottonseed industry ever held assembled yesterday in the convention hall of the Inside Inn at the Jamestown Exposition for the eleventh annual convention of the Interstate Cottonseed Crushers' Association. Fully 600 are in attendance, including not only those directly interested in cottonseed products, but delegates from commercial exchanges from many cities and a large number of manufacturers and dealers in cottonseed machinery.

The large attendance was due particularly to the ever-increasing growth of the industry and the especial attraction of the exposition itself. The convention will be in session four days, and meetings will be held in the mornings of each day, leaving the rest of the day for sightseeing.

The program provides for a number of interesting and instructing addresses by men well posted on their subjects, and each address is to be followed by a discussion on the subject by the members. Among the reports already submitted was that of the publicity committee, which is composed of Messrs. L. A. Ransom, chairman; J. W. Allison and B. F. Taylor. The selling price of cottonseed products, as a rule, is less than any other commodity of the same actual value with which they compete, and this committee called attention to the necessity for obtaining better prices, which could not be done without proper advertising. That the values can be increased, the report stated, was demonstrated by the conditions prevailing this year. The members of the committee feel that, in a measure at least, it may claim credit for some of the good results that have been accomplished this season by the increased values of these products, but they recognize that the important work in this direction has only begun. During the year the publicity committee published three separate bulletins, with a total issue of 12,000 copies, the first two bulletins containing information of every character regarding the uses and values of cottonseed products, and the third being entirely devoted to foreign trade. It was also instrumental in having J. L. Benton of Georgia appointed as a special representative of the United States Government to investigate the cottonseed trade conditions in foreign markets. The committee urges upon the association that it continue its publicity campaign, but upon broader and more efficient lines.

The committee on rules, of which L. A. Ransom is chairman, is one of the most important committees of the association, as it regulates the buying and selling conditions of the trade. This committee was in session three days prior to the opening of the convention, and its report covers a complete revision of the rules, which was necessitated by changed conditions, none of the changes, however, being of a radical nature. An additional rule provides for food classification of cottonseed-oil meal, for the benefit especially of the New England and foreign trade, as heretofore the only rule existing was for meal for fertilizer purposes. It is also probable that some new measures will be adopted covering basic prime crude oil, in order to meet the present conditions in that line.

Resolutions were adopted deploring the damage to this year's cotton crop by the

long period of bad and unseasonable weather and inviting the cotton growers to correspond with the various members of the association if they are in need of seed for replanting, and the members were urged not only to keep a supply on hand until the replanting season was over, but to furnish it to the grower at the average cost of the seed, or, if necessary, to give it to them in order that the crop may not be either a failure or run short. A resolution was also referred to a committee looking to the commencing of the fiscal year in May, when the conventions are held, instead of September.

According to an unwritten custom, Mr. L. A. Ransom, the present vice-president, will be elected to the presidency, and there is every evidence, from the vast amount of good work which he has done in the past for the association, that during his tenure of the office the work of the association will be pushed with extraordinary vigor. For the vice-presidency there seems to be a well-defined movement in favor of H. J. Parish of Memphis, Tenn., who also has been active in promoting the interests of the association.

Never before in the history of cotton-

A YEAR'S WORK FOR COTTONSEED CRUSHERS.*

By F. H. BAILEY of Paris, Texas.

Since the organization of the association with but a handful of earnest, progressive members at Nashville, Tenn., July 16, 1897, its growth has been constant and continuous, and we assemble today with a larger membership than at the opening session of any previous meeting in our history. But our work in securing new members is by no means complete, and must not be permitted to lag. There is yet abundant material outside of our organization that should be brought into it. The cause in which we are engaged is one that should possess the profoundest interest for every person in any way connected with the cotton-oil industry, and only when our purity of intent and purpose shall have been sullied by selfishness and dissensions will our laudable purposes fail of accomplishment. Let us permit no disturbing element to mar the harmony now existing, but let us unceasingly work together for the promotion of its interests and the diffusion of its principles, to the end that its benefits may be more universally felt and acknowledged.

Through our equitable code of rules governing all transactions in cottonseed products, sellers and buyers are protected alike in their rights, differences are promptly, equitably and inexpensively adjusted by the association arbitration committees, and a resort to the courts is seldom, if ever, heard of.

The bureau of publicity, as will be shown in its report to be submitted for your consideration, is indefatigable in the work of finding new uses and new markets for all the products of cottonseed, and is accomplishing all that can be expected of them with the money at their disposal.

In our watchful attention to all legislation in any manner affecting the cotton-oil industry, as well as in many other matters not necessary to recapitulate, the association stands for the protection and benefit of all who are in any way connected there-

*From President's address before the Interstate Cottonseed Crushers' Association.

seed has it been in such splendid shape, and the future holds out alluring and encouraging prospects for the broadening of the industry in every line. Great satisfaction is expressed on every hand by the members concerning the present condition of the industry and its prospects, and they feel that this has been due in the greatest part to the combined efforts of those engaged in the industry through the association which has brought about the high standing of the cottonseed products. They feel that it has passed the stage of being considered and referred to as a by-product, and that with the standing which it now has it is entitled to be known as a separate and distinct product.

The association has shown a healthy increase in membership during the year, and every effort is to be made to bring in everyone entitled to join, so that the industry can be well guarded and its interests protected for its general benefit and future growth.

In addition to the annual address of President F. H. Bailey of the association and the reports of other officers, the program includes the following addresses: "A Good Name Is Rather to Be Chosen Than Great Riches," by Dr. H. W. Wiley, chief chemist, Department of Agriculture, Washington, D. C.; "Cottonseed Oil Publicity," by Nathaniel C. Fowler, Jr., Boston, Mass.; "Cottonseed and Cotton-Oil Industry," by Hon. A. S. Burleson, M. C., Austin, Texas; "Foreign Trade," by Hon. John M. Carson, Chief, United States Bureau of Manufactures, Department of Commerce and Labor, Washington, D. C., and "Oil-Mill Insurance," by I. Jalonick, Wm. H. Stone.

with. We are, it is true, doing a vast deal of work that benefits some cotton-oil mills, refiners, exporters and dealers that do not belong to the association or contribute anything in support of the advantages they derive from our acts. This is not fair, it is not just, and it should be our constant endeavor to further and continue to perfect the objects for which we are associated together until the time shall arrive when no one engaged in manufacturing or handling cottonseed products will be able to do business therein in a satisfactory or remunerative manner without being a member of this association.

I am glad to be able to state that the financial condition of the association is all that could be desired, and in proof of this assertion I refer you to the reports of your secretary and treasurer.

The committee on rules, as provided in the by-laws, met three days in advance of this annual session, and will present such amendments to the rules as the experience of the past season's business seem to them necessary.

Ample notice of the time and place at which the committee would meet was given to all members, and most careful consideration has been given to all amendments proposed.

The committee is composed of fair-minded conservative members of many years' experience in the business, who have large interests at stake both as sellers and buyers of cottonseed products, and their report will embody the best possible solution of the amendments necessary to conserve the interests of all members. It is hoped that no captious objection will be made to any proposed amendment for personal reasons, but rather that the general good of the entire membership will alone be considered in passing on the amendments submitted as the mature judgment of the committee.

You are aware that at the session of the association held at New Orleans two years

ago provision was made for establishing a bureau of publicity, and dues were prescribed to provide a fund for carrying on the work made incumbent on the committee to be appointed. As stated in the report of President Hamilton at our session held at Atlanta last year, so much dissatisfaction was developed to the payment of dues to carry out the purpose for which they were levied that a meeting of the executive committee was held and the secretary of the association was instructed to suspend their further collection and return the amount already received by him. This action of the executive committee was reported to and approved by the association at our last annual meeting.

Notwithstanding they were left without funds for the prosecution of the work contemplated, this committee, composed of L. A. Ransom, Jo. W. Allison and B. F. Taylor, kept undauntedly at work and submitted a very interesting and instructive report at the Atlanta meeting, showing the condition of the cotton-oil industry, the intrinsic value of cottonseed products, the action taken by other manufacturing industries to improve conditions, and stated their ideas of what a publicity bureau should be and what it should do, concluding with an eloquent peroration relative to the great industry we have created within a generation, the vast number of articles of prime necessity to the world we have produced and the future that awaits us if we but seize the opportunity knocking at our doors.

It is unnecessary to further allude to this report, as it has been in print for nearly a year, and has no doubt been read many times over by everyone present. Its presentation at our last meeting, perhaps more than any other one thing, led to the adoption of an amendment to the by-laws by unanimous vote, prescribing dues to be paid by crude mills and refineries to create a separate fund for the use of the bureau of publicity.

Recognizing their adaptability for the work to be done, I reappointed the members that constituted the committee the previous year, and the work they have done has shown the wisdom of their selection. They will submit their report during our meeting, and it will deserve your careful attention as treating of subjects of vital importance to our industry.

Practically the same conditions as were detailed in the report of the committee on legislation at our last annual session relative to the import duty imposed by certain European countries on cottonseed oil prevail today, and the recommendations then made apply with equal pertinence now.

Austria, Spain and Italy impose duties virtually closing these markets against American cotton oil. Germany threatened for a time to do the same, but an amicable adjustment of trade differences by the North Commission appointed by our Government has quieted our apprehensions relative to that country, at least for a time, as there is not to be any further discrimination on the part of the German Government before the first of July next year.

In a message dated Paris, December 5, 1906, the Associated Press conveyed the information that the French Government threatened cottonseed and cottonseed oil, of which there is an enormous importation from America, with almost prohibitory duties, and the Department of State at Washington was appealed to through your association to avert this action if possible. A short time since we had the assurance that by the prompt intervention of Ambassador McCormick all danger from this source had been temporarily averted. The latest information we have, however, relative to the situation in France as it relates to cottonseed oil is contained in a communication from Washington to one of the

official organs of the association, and is by no means reassuring in tone. It is based on a report to the Department of Commerce and Labor by Consul-General Frank H. Mason of Paris, just made public, and but for its length would be incorporated in this address.

The importance to our industry of being able to market cottonseed oil in foreign countries under reasonable restrictions is such that we should make an earnest effort to induce our Government to request a removal of the present high tariff on this commodity. How best to accomplish this result should receive your most earnest consideration.

During the latter part of last year Major John M. Carson, Chief of Bureau of Manufactures, Department of Commerce and Labor, sent abroad 300 printed copies of a circular-letter I issued after consultation with him to the United States consuls throughout the world asking for statistics relative to the use of cottonseed oil, cottonseed cake, cottonseed meal and linters in the countries to which the consuls receiving this letter were accredited. The result of this action is that the consuls have taken hold of this work with vigor and are sending in a great number of reports. As Major Carson is to address the association during the present meeting, and will give us some very interesting information on the scope of this work, it is not proper that I should give it more than mere mention.

Shortly after the beginning of the present year I was informed by Major Carson that there was an unexpended balance appropriated to the use of the Department of Commerce and Labor by Congress the previous year for the purpose of sending representatives abroad to investigate and report on the use of cotton products, and that the Department was disposed to expend this balance in exploiting cottonseed products in foreign countries by sending a special representative abroad for this specific purpose, but desired to confer this appointment on some one identified with the business who was entirely satisfactory to the cotton-oil trade. After a good deal of correspondence and resultant delay, the executive committee of the association joined others in recommending Mr. J. L. Benton of Monticello, Ga., the manager of an oil mill, secretary of the Georgia Cottonseed Crushers' Association, and an exceptionally bright business man connected with other important industries. Mr. Benton visited Washington, conferred with Major Carson, was tendered and accepted the appointment, and is now in Europe on this important mission. There is no question but what he will give a good account of his work and furnish much information of value relative to what may be accomplished in increasing the trade in cottonseed products in foreign countries.

The association owes a debt of gratitude to Major Carson for the great interest he is taking in our industry, as shown by his official acts in the particulars noted, and we are exceedingly fortunate in having so able a friend at court. He has made very valuable suggestions as to continued appropriations for the purpose of exploiting our products in foreign countries, and has not hesitated to suggest the propriety of such appropriations to members of Congress.

Besides the valuable data obtained by United States consuls and to be obtained by our special representative, Mr. J. L. Benton, the literature being sent out by the bureau of publicity reaches Europe as well as every hamlet in this country, and combined are causing a great many inquiries to reach us from home and foreign countries which may be expected to largely increase in volume. We are sure to receive a great deal of information for which we have asked, exactly the character of

information we need, and it is very important that a conclusion be reached at this session as to the use we will make of the opportunities that will be shown for vastly increasing the foreign trade in cottonseed products. It won't do to say let the bureau of publicity handle the proposition. They are now doing far more work than we have a right to expect gratuitously, or virtually so, of business men whose time is to their personal interests a valuable asset. It will not do to temporize with this question; it should be determined now.

In the endeavors that have been made to

COTTONSEED OIL PUBLICITY.*

By NATHANIEL C. FOWLER, JR., of Boston.

If I ever had the address of the initial advertiser, I've lost or mislaid it. I don't know who wrote the first advertisement. I don't know who knows, and I don't care.

In these days of hustle and business strenuousness it is better to look forward than backward.

I am not going to defend advertising, because it needs no defense.

If advertising was not a commodity the American merchant and manufacturer wouldn't spend \$400,000,000 a year in newspaper, magazine and printed matter publicity—an aggregate at least 25 per cent. greater than the advertising output of a quarter of a century ago.

The mystery about advertising has been solved, and the discoverer found that there was no mystery about it.

Advertising is just a part of business, as much so as the factory and the goods, and no more.

You can't do business without something to sell, a place to sell it in, salesmen and an additional something which is accessory to the salesmen and to business-getting in general, and that something is advertising.

Everybody advertises, even those who say that they don't.

Every method of selling, from personal solicitation to the hideous billboard, is a direct or an indirect part of some kind of publicity.

The man who cannot use advertising in his business has no business to be in business, and generally isn't.

So much for preamble.

Now let's get down to business, and let's deal with that biggest littlest thing on earth, the cottonseed, once an outcast, now playing the second lead on the Southern stage of trade.

Let me deviate for a moment to recall a summer hotel conversation: Last summer I had the pleasure of introducing my friend, Professor Dolbear, who is, perhaps, our greatest living scientist, to one of my friends, a cottonseed-oil official, who is predestined to become our leading man of oil. In a semi-serious way Professor Dolbear referred to seedless oranges and to other seedless fruits, and suggested the creation of a seedless cotton.

"Professor," the oil man ejaculated, "you'd better make a cottonless seed, for that's where the money is!"

When a by-product—a waste product—becomes in a few years a great national and international industry it is obvious that it possesses enormous intrinsic value and opportunity for continuous and profitable exploitation.

Not as a cottonseed man, but as a more or less simple layman, one who keeps his finger on the pulse of trade, let me discuss with you the public-seeing side of the cottonseed, because in the public-seeing side is vested its financial success.

Oil and grease are world commodities, and always will be. As the population increases their use will increase. The relative output of any one kind of oil or grease

*An address before the Interstate Cottonseed Crushers' Association.

secure appropriations from Congress for the purpose of sending special agents abroad to investigate foreign markets for cottonseed products the association has had the earnest and continued support of a number of Southern Senators and Representatives. One of the ablest and most prominent of these, Hon. Albert S. Burleson of Texas, I am pleased to state, is to favor us with an address, in which he will have something interesting to say on the necessity for special agents to find new markets for cottonseed products. "Attend, that you may receive instruction."

is dependent upon the methods used by those who make and sell it. If less cottonseed oil is sold it will be the fault of the cottonseed-oil men, and if more is put out, to the cottonseed-oil men should be given the credit.

In this particular case it is simply a question of exploitation and the distribution of enterprise.

Cottonseed oil possesses intrinsic value. It is a necessary commodity. In everything, save flavor, it is the equal of olive oil, and it can be produced at a much less price. As a healthful and economical cooking proposition it is in the van of all cooking fats and oils—first, because it is purely vegetable; secondly, because it is healthful; thirdly, because it is economical to use; fourthly, because it is the cheapest good thing on earth.

The more truth told about cottonseed oil the better for the oil and the maker and user of it. There is nothing to disguise. This condition exists in mighty few other cases. Most things are porous with "outs," and can't be sold without "plugging."

It is both inexpedient and unbusiness-like to lie when the truth will do the business. Shame on the fellow who lies against his interest.

The use of cottonseed oil, great as it is, is infinitesimal compared with its probabilities and possibilities. Where one gallon is sold today, a dozen gallons may and should be sold tomorrow, and will be as soon as the public as a whole knows and appreciates its true character.

The use of cottonseed oil is pre-eminently a people's or a consumers' proposition. It is a household necessary; it appeals to the housewife as much as does soap, sugar or breakfast food. Because it is a family commodity, its sale is largely controlled by women. Man's interest in it is somewhat limited to its production and sale. Woman's interest covers the purchase and use of it. Man has little to do with the buying or using of any regular commodity. Man amounts to practically nothing outside of his office and business. At most he has but the nature-given right to pay the bills.

Those of you who are married, those of you who expect to be married, and even those of you who have decided never to train in double harness, know that practically everything used for household and family purposes is purchased by the woman or under her direction. Not only does she control the table, but she is responsible for the children's clothes, and even for her husband's clothes. Man's bravery is limited. Many a man who is courageous enough to stand in front of the cannon's mouth, who dares to hunt Teddy bears in the Republican wilds, who is willing to risk his body and mind holding up or down the presidency of your association, actually wilts in front of that skirted power behind the man greater than the man himself—woman, the boss-in-chief of home and money.

Where is the man who dares wear a coat or pair of pants which doesn't suit the

woman of the house. Go through the advertising pages of the great newspapers and the big magazines, and you will find that 90 per cent. of the announcements are directed to women.

From an advertising point of view, from several other points of view, man amounts to mighty little. The woman controls the situation. If she is for the commodity, the commodity succeeds. If she is against it, it fails.

Great is woman. Little is man.

As I understand it, the major part of your exploitation work has been directed to the trade, and has consisted of more or less circulars, conventions, discussions and resolutions.

Well and good. These things count. The trade must not be ignored; but more attention should be given to the source of trade—the woman—the consumer-in-chief.

A few days ago the New England electric-light proprietors suffered under one of my addresses. For various reasons I don't pretend to know everything, and electric lighting is a little out of my line. Yet I took the chances of springing my woman-consumer idea. I claimed, with all the boldness of ignorance, that the increase in the use of electricity was dependent upon the woman—the housewife who paid a dollar a month for electric lights and a dollar or more for a flatiron heater and electric stove.

Upon this point I waxed eloquent. As I didn't know whether or not I was right, I didn't care what I said. I was unhandicapped by fact, so far as I knew. And yet I had struck the keynote. Everybody present, from the president of a great lighting company to the superintendent, admitted that, although they sold hundreds of thousands of dollars' worth of electricity for manufacturing purposes, the dollar-a-month buyer, the housewife, was the customer to be catered to, and that in her was vested the bulk of the profit.

It is obvious that the local dealer will not sell that which is not demanded.

Demand is the basis of business-doing. The right to demand, in your case, is in the woman.

Notwithstanding that cottonseed oil is a Southern product, and notwithstanding that the Southerner, including the Southern woman, is proud of her land and of what it produces, cottonseed-oil sales show but a small percentage of what they should be and may be.

There are several reasons for this: First, the Southerner knows cottonseed oil, or thinks that he does, possessing a familiarity which may breed some contempt. The Northerner doesn't know cottonseed oil except in a general way. The Southerner may be prejudiced against it because he thinks that he knows it, and the Northerner may be prejudiced against it because he does not know it. Secondly, cottonseed oil has been used as an adulterant, and the people, as they run, do not appreciate the fact that an adulterant may be better than that which it is used to adulterate. Thirdly, the truth about cottonseed oil has not been more than intermittently preached. The several cottonseed-oil mills have crushed the seed, made the oil and have sold it, and most of them have confined their energies to the trade and not to the consumer. There has been no extensive and concerted effort to exploit the virtues of cottonseed oil along strong, extensive, consistent and persistent educational lines. The public hasn't been educated up to cottonseed-oil quality and economy. Little effort has been made to break down the prejudice against it and to properly present it as the most economical and purest cooking fat on earth.

It may be said that it is not necessary, because the Southerner knows what cottonseed oil is. Perhaps he knows it. But

he doesn't seem to realize it or to feel it. The mere knowing of a thing doesn't always increase its sale. It is necessary that the customer or consumer actually feel the truth as well as know it.

I suggest an extensive and persistent campaign of educational advertising to be conducted by your association.

By educational advertising I don't refer to broadside or to what is generally supposed to be regular advertising, but to a sort of reading-matter publicity, which may become a part and parcel of the woman's daily reading.

The Southern press and trade papers have been most liberal. They have given columns and pages to the exploitation of the cottonseed. But the press alone cannot be expected to do it all, nor to work for the mere love of it, nor for purely patriotic reasons. The newspaper is a business institution. Its editor and publisher eat food and wear clothes. Few of them run their newspapers for the benefit of their health or for the fun of it. They are obliged to earn their living as other men do, and they can use money as well as the other fellow can.

You represent the cottonseed-oil industry, and you are financially interested in it. The newspaper should receive your financial as well as your personal co-operation.

Let me say right here that I have no connection with any newspaper. I am telling the truth this time for the love of it.

It is obvious that I should not present in a to-be-reported speech the working machinery of an educational campaign, because much of it should be done in secret.

At the close of my address I will attempt to suggest ideas if you will question me.

Generally speaking, educational advertising consists of the circulation of matter interesting to the public and of financial value to the producer of the commodity.

The virtues of cottonseed oil should be kept constantly before the public through the medium of the newspaper and through the wise circulation of acceptable printing matter, all of it, or most of it, to be of popular character and devoid of the technical.

These articles should not only tell the public what cottonseed oil is, but they should tell the people how to use it, and keep on telling it.

The fact that the woman is more or less familiar with cottonseed oil and its uses, or thinks that she is, is no excuse for not telling her over and over again the truth about it. She should be made to realize that cottonseed oil is as necessary to the proper maintenance of the home as is the mattress or the cookstove.

There is a psychology of everything, including business. Psychology is but another name for opportunity—for opportune opportunity.

The commercial psychological moment has arrived.

Germs and microbes have become our prominent citizens. There are few people, from the crossroads hostler to the member of the Legislature, who cannot intelligently discuss purity and impurity, germs and microbes.

For the last few years the newspapers and magazines have been filled with germ matter.

We are entering a pure-food age. We are receiving a practical health education. We are living longer and enjoying life. We are realizing germ dangers. We are appreciating the value of pure food, and vegetable food especially.

The recent packing-house investigation has done much to convince the people that vegetable matter is purer, healthier and better than animal matter.

While the sale of animal products may

not materially decrease, the use of vegetable food is rapidly increasing.

Even the patent medicine vender, who knows the great washed and unwashed public, advertises that his concoction contains vegetable ingredients.

There was never so good a time for the exploitation of a vegetable product, and especially one like cottonseed oil, which cannot help being a permanent commodity.

For these reasons your educational work may run along two effective and distinctive lines—one affirmative and the other negative—a condition not often enjoyed.

Affirmatively you can present the truth about cottonseed oil—tell of its purity and its good-doing character, and at the same time you can quietly mention the impurity of animal products.

Nature is with you. Animal is against you. Let Nature take her course. But don't forget to oil her way with the only successful lubricant—cash, and plenty of it.

A MARKET OF STOLIDITY.

Situation as to Iron in the Birmingham District.

[Special Cor. Manufacturers' Record.]
Birmingham, Ala., May 20.

Practically there is no change in the iron market since last letter. The surroundings are just the same, and there is no change in prices. In market appearances there is an absence of that keen and breezy life that is characteristic of active demand. The market has settled into a market of stolidity. The seller practically says to the buyer we have a very little iron, and are indifferent about selling, but if you want it you can get it at my price. And the buyer, if he gets it, pays the seller's price. As it has been for some time past, it is more a question of finding available iron than of what is the market value.

Every day emphasizes the fact that a material part of requirements heretofore reported as satisfied are bobbing up to be satisfied again. During the past week there were several interests in the market with importunate requests for iron, who let it be known some time ago that they had secured all they needed. But on such a market as we have had there is always a brigade of laggards. They never know when "delays are dangerous." The buying for 1908 has commenced, but the volume of business has so far been of only very moderate volume. There is but little difference between sellers as to the price for delivery the first quarter of 1908. It is pretty uniform around \$18.50, basis of No. 2 foundry. The opening sales were a little lower, say, \$18.25. Sellers are not anxious to put out a long line for this option, and are not pushing sales. It is the buyers who are insistent upon fixing values for this delivery. The result is that nearly all the sellers have some 1908 business on their order-books. The bulk of the business, though, being booked is principally for spot or nearby and for fourth quarter deliveries.

One influential interest said to your correspondent that they had 12 inquiries on Friday, and had to decline the major part of the business because they could not get the iron. As it was, they sold 800 tons for spot and nearby shipment on the basis of \$23 for No. 2 foundry and 400 tons analysis iron at \$22, in which was some each of Nos. 3 and 4 foundry. The same interest sold some moderate-size lots at \$20 for fourth quarter delivery. This price seems to be the generally accepted price for that delivery, and your correspondent has run on nothing below that figure. The volume of inquiry, considering the situation, is a surprise to sellers, and elicits much comment. The vagaries of the market are shown from the fact that there was a sale of analysis iron on the basis of \$22.50 for No. 2 foundry, delivery last

quarter. There were some sales of both gray forge and the other lower grades on the same basis as is here quoted. There are already murmurings about disappointing deliveries, and buyers may expect it right along. Warning of this was given several weeks ago. This time the fault won't lie with the railroads. There was some inquiry for third quarter delivery iron, and some sales are reported of moderate amounts at \$21.50. One sale of 600 tons is reported at that price for delivery for August, September and October. There were no transactions reported in basic iron.

The pipe works, while not rushed with orders, are comfortably full of business, and it is probable that for desirable business a little shading in current quotations could be obtained. Four and six-inch pipe are quoted at \$35, 8, 10 and 12-inch at \$33, while the large sizes are quoted at \$31. For relays the demand is so much greater than the supply that any quotations are simply nominal.

In scrap iron a few changes have occurred, the tendency being toward rather higher prices. Quotations are as follows: Old iron rails, \$23.50 to \$24. Old steel axles, \$16 to \$16.50. Old iron axles, \$24 to \$25. Old car wheels, \$20.50 to \$21.50. No. 1 railroad wrought, \$17.50. No. 2 railroad wrought, \$15.50 to \$16.50. No. 1 country wrought, \$15 to \$16. No. 2 country wrought, \$14 to \$14.50. No. 1 steel, \$13.50 to \$14. Machinery castings \$17, with sale of 400 tons.

Stove plate, \$13.50 to \$14.50. Borings, \$10 to \$10.50. Cut boiler, \$13.

The dealings during the past week or 10 days have shown more life, and the outlook is favorable to increased transactions and a profitable market. In both coal and coke there has been a good market, with a demand that absorbed all that was offered. Coke is quoted at \$3.75 for furnace and \$4.25 for foundry coke. Coal is dependent so much on character of offerings that it is very difficult to give positive and unerring quotations. Prices for run of the mines are given at \$1.40 to \$1.60 at the mines.

Attention is directed to the fact that Bartlett & Tewksberry at East Birmingham are commencing the erection of buildings to be used for foundry and machine shops at which they propose to make sugar mills and steam engines (of their own pattern), having steam feed. They will also turn out gray and steel castings and forgings. The foundry building now being erected is 225x100 feet, and the machine shop is to be 150x65 feet. The battery of boilers is to be 300 horse-power, and the works will be equipped with electric drive. When under way these works will be an important addition to our industrial interests.

There has been an important change in the affairs of one of our industrial interests. The Case-Fowler Lumber Co. has sold out to the McLean Lumber Co. of Buffalo and New York. The purchasing company is said to be one of the largest of the hardwood companies, and is rated financially very high. The McLean Company is operating plants at Chattanooga and other Southern points. The deal involved the transfer of several thousand acres of hardwood lands situated in Alabama.

There were some incorporations during the past week, and among them was that of "The Never-Slip Buckle Co.," with a capital of \$15,000. It proposes to make cotton-bale buckles to be used in baling cotton. G. H. Davis is president and R. H. Nesbitt is secretary-treasurer. A few other incorporations were filed for various

objects, but none of them were important.

While we are much possessed by the rate of improvement we see every day around us, we are alive to the fact that we have no monopoly in that line. The fact that Sibley Bros. during the last week were awarded three different contracts at as many different points is very fair evidence that others have the improvement fever to our benefit and profit. The brick used indicates first-class improvements. Although the sale of the 150,000 tons of rails marked an epoch in the history of Birmingham, you rarely hear it mentioned unless conversation lags, when it is pulled out to keep it from dying out. Several of the leading shops were visited the past week, and it is no exaggeration to say that one had to pick his way along and through masses of work in all stages of preparedness and completion. Birmingham has never before commanded the amount of work that is on hand now. Everything is in a rush, and more is in sight.

The Southern Cotton Association was represented at a meeting here the past week of the State Presidents of Alabama, Georgia, Louisiana, North Carolina and Mississippi. They called their work good, for one of them said: "We have at last devised and put in execution a plan which we are confident will forever eliminate the possibility of cheap cotton in the South." The meeting was unheralded, and it was a very quiet one, but it was full of business. The plan is a very thorough one, and looks as if it was entirely practical. It has been made public, and lies before your correspondent as he writes. But it is too long to be used in full in this letter. It will undoubtedly be given wide publicity, and will be fully tested the coming season. From a common-sense point of view, there is no reason why it should not be successfully conducted. The adoption of the plan means the selection of Birmingham as the headquarters of the association. Such honors are evidence of the possession of those advantages that are recognized as essentials to success. The explanation of the plan concludes with: "It is essential that every county shall begin immediately an active campaign of organization so as to be able to control the incoming crop."

J. M. K.

Will Reconstruct Yards.

[Special Cor. Manufacturers' Record.]
New Orleans, La., May 18.

Morgan's Louisiana & Texas Railroad & Steamship Co. will within a short time invite bids for the reconstruction of all the tracks in its yards at and near the head of Elysian Fields avenue. The company has only just received a renewal of its preferential rights to this property, and is now considering plans for the reconstruction of the tracks made necessary by the terms of the renewal. At present the company holds a franchise to the property known as the Morgan wharf, as well as that where its yards are now. This franchise expires next year. The company for some time has been endeavoring to secure a renewal of this franchise, but no such action could be taken, as the matter is no longer in the hands of the City Council. The Board of Port Commissioners, however, has given the company a renewal of its preferential rights, and the company will be entitled to hold this territory just so long as it conducts its business with the best interests of the port in view. It has been forced to give room in its yards for the construction of two main line belt commission tracks and for a 30-foot roadway that the Dock Commission will build. This will necessitate the reconstruction of nearly all the tracks in the yards. Approximately \$40,000 will be spent on these contracts.

CURRENT EVENTS AS VIEWED BY OTHERS

WORKING UP TO CAPACITY.

[Industrial World.]

The phenomenal condition of today does not appear to have received any setback from pessimistic talk. Time was, and not so many years ago, when buyers were content to wait until the close of one year before contracting for future needs. This is not so today. We learn that buyers are eager to place contracts for material for the ensuing year. They do not ask any great concessions. They are willing to accept a small reduction and to place orders liberally. The producers are not anxious to accept orders so far in advance. They believe that they can command better prices by holding off.

One of the prime reasons for assurance on the part of the manufacturers is the fact that there are no unsold stocks. It used to be that manufacturers carried generous stocks for immediate shipment. This seems to be a thing of the past. Orders must be placed from three to nine months in advance. Those who have waited in the past have learned that they cannot get material at any price, let alone at the reduction they had hoped for. So it is that only bold buyers have been able to fulfill contracts.

The country is practically working up to capacity. Yet there is scarcely a well-equipped plant that could not dispose of at least 25 per cent. more of product if they could produce it. The natural tendency will be toward increased output, which means an enlargement of existing facilities. This, in turn, will create greater requirements. Where are these materials to be had? We are straining every effort to supply the normal demand. We are tapping European countries for their surplus. We have nothing to export, nearly everything being consumed at home.

With our population increasing more than 1,000,000 souls from immigration alone each year, there is scarcely any wonder that we can find a ready market for all our manufactures. The population which has been planted on the soil and become thoroughly Americanized are consuming more each decade. This applies to all products, whether of the soil, the loom or the factory. Unless revolution terminates our continued prosperity, it is an open question whether there is to be sufficient retrenchment to reduce the nation to the poverty which it has suffered in the past. Higher prices seem to incite the people to greater efforts, and no decline in our prosperity is visible in the future.

HINT TO STEELMAKERS.

[New York Tribune.]

One of the most notable industrial economies which have ever been initiated in the last few years results from the use of waste gases from the stacks of blast furnaces for the development of power. In this manner any expenditure for fuel for driving machinery in the steel mills which are now so frequently associated with the furnaces engaged in producing pig-iron is rendered unnecessary. As yet only the more progressive manufacturers in this country have followed the example set in Belgium by John Cockerill & Sons, but the advantages of the system are being rapidly recognized both in America and Europe. Moreover, since there is apparently not work enough in the best-managed plants to utilize more than about half of the power which could be generated without the payment of a dollar for coal, writers for technical periodicals have of late been considering what might be done with the

rest of it. More than once it has been proposed that the ironmasters go into the business of supplying power to outsiders in their neighborhood. In *Cassier's Magazine* Mr. F. E. Junge suggests that they use it themselves to operate electric railways, either to haul raw materials to their factories and mills or to carry their product to market.

The proposition is certainly fascinating enough to arrest attention. According to Mr. Junge, even where one-half of the waste gas from a blast furnace is turned to account by its manager the residue is big enough to produce 25 horse-power daily for every ton of pig-iron made there. The output of the furnaces in this country last year was 25,000,000 tons of iron. This amount represents a waste of at least 625,000,000 horse-power in the course of 12 months, or from one and two-thirds to two million horse-power daily. Counting in losses from the production of coke and from other sources, Mr. Junge estimates the daily waste at 4,000,000 or 5,000,000 horse-power, but if that from the iron furnaces alone be considered the showing is certainly remarkable. It is large enough to run from 1500 to 2000 electric locomotives, each having a capacity of 1000 horse-power; in fact, since the consumption would not be absolutely continuous, day and night, these figures slightly understate the service which might be performed.

Owing to geographical distribution, the volume of their production and other circumstances, some plants would derive greater benefit than others from the acceptance of Mr. Junge's advice. Perhaps Pittsburgh might be tempted to make the experiment first. Her steelmakers already have a railroad of their own (the Bessemer & Lake Erie), which was built to bring them their ore. The line, which is upward of 100 miles in length, is now operated by steam locomotives. If these were replaced by electric engines any outlay for fuel would be needless. Pittsburgh produces fully a quarter of the pig-iron of the United States, and consequently has at her disposal a quarter of the power the waste of which is discussed by Mr. Junge. Her share is undoubtedly larger than this, because the principal production of coke is conducted next door to her (at Connellsville), and she could not begin to use it all in transporting ore. The remainder might possibly be large enough for service in carrying her steel to tidewater. To build an independent road to Philadelphia would unquestionably be an audacious undertaking, and for many reasons it would apparently be impracticable. Still, after experience had been gained with electricity on the road to Lake Erie, Pittsburgh then would be in a position to decide wisely what other ventures of the same kind would be profitable. Power is now transmitted over at least one line in this country which is more than 200 miles long. With the increase in voltages which electricians hope soon to achieve, transmission from one end of Pennsylvania to the other may prove feasible, and within the next five or ten years one formidable obstacle to the operation of an electric railway from the Ohio to the Delaware may be removed.

SAVINGS BANKS AND SECURITIES.

[Wall Street Summary.]

Savings banks are in a great measure an indication of the thrift, frugality and industry of a people. In this connection those in America, particularly in this State, have no reason to blush for a com-

parison with similar institutions anywhere. Conducting a business that was manifestly originated to serve the poor man, their methods are noiseless and unobtrusive. We never hear of their transactions; we just know they are with us, doing much good and amply protected by the law. We are very proud of them, and we are glad to learn of things that benefit them. Hence in the present state of inertia in the stock market we are more than pleased at its beneficial reaction on savings banks. Usually market fluctuations amount to little with savings-bank investments, for the same are held very generally until maturity. But in the present depreciation the savings banks have been enabled to invest at prices productive of much more income than formerly, and, according to Mr. W. B. Van Rensselaer, president of the Albany Savings Bank, at the Chamber of Commerce yesterday, savings banks may be enabled thereby to pay a 4 per cent. interest rate on next accounting. Last interest day many did so, and he looks for an increase in the number. Where the rich man loses the poor man gains. Well, it's an ill wind that blows nobody good, and we're glad the savings banks are the gainers.

WHEAT SPECULATION.

[New York Journal of Commerce.]

Those uneasy persons with much money and an eager desire for more who find scope for their gambling and manipulating proclivities in the stock market when opportunities are to be found there seem to be "plunging" now in wheat speculation. How far the recent advance in the price of wheat may be justified by present and prospective conditions it is difficult to calculate, because the most important factors are uncertain, but that very uncertainty is favorable to speculative activity. The season is late, and weather conditions have been reported unfavorable to the wheat crop in various sections, especially that part of it sown in the spring, but there is time for considerable recovery if later conditions should prove more auspicious. Besides, there is believed to be a larger portion of last year's crop carried over than is usual. There are reports of prospective shortage from some foreign sources of supply, but how great this may turn out to be cannot now be estimated with any approach to certainty.

There is a probability that our wheat harvest of the present year will fall considerably below that of last year, and it may be under the average of recent years. The increase in Northwestern Canada, which was naturally to be expected, will probably not be fully realized, and it is fairly certain that the Russian and Roumanian supply will be short. There was sufficient ground for an advance in prices in the actual wheat market, and more especially in options for future delivery, but the moment the speculative spirit was aroused this was sure to be exaggerated. The eager desire to make money quickly by taking risks on margins was awakened and buying orders were lured to the exchanges from every quarter, with the effect of whirling prices upward. The plungers with their millions were quick to seize the opportunity, and they will keep up the excitement until the breaking point is reached. Some of them may get hurt, but they can stand it, or if they cannot it will not matter. In the net result it will be the "professionals" who rake in the winnings and "the public" who supply them. Perhaps this cannot be helped. Ulti-

mately the trading in futures will establish a normal level of prices, determined by as close a relation of supply and demand of the actual commodity as can be calculated. The power of the manipulators will be at end or so closely circumscribed that they will retire. Whether or not it is true, as surmised, that the railroad and steel magnates are the chief "plungers" in the seething wheat market, as they have sometimes been in the stock market, it is plausible conjecture from their generally greedy behavior. It would be better for them, and for a sober public estimate of them, if they would devote themselves to the great interests in their charge and get rid of the reputation of speculators. We need "captains of industry" and masters in trade able to resist the passion for gambling and content with the rewards of honest enterprise.

POWER AND BEAUTY.

[Columbus (Ga.) Enquirer-Sun.]

A shade tree planted for each horsepower of electrical energy developed is the unique record of Columbus in recent years.

Columbus, with its wealth of foliage and flowers, is already one of the prettiest cities in the entire Southland, and if the above parallel is maintained until all of the splendid water-power at this point is developed it will be, indeed, "a city beautiful."

The Columbus Power Co., whose ambitious plan it is to develop the great water falls of the Chattahoochee river north of this city, already has one river plant in operation at North Highlands, with a capacity of 12,000 horse-power, perhaps one-eighth of the total power afforded by the 360-foot plunge of the river between this city and West Point. If the same degree of attention is given to the esthetic as to the practical side of city life in the future as during the past decade, it will be seen that the development of some 80,000 and more horse-power will mean 80,000 more shade trees for this city and suburbs.

Of course, it is simply a queer coincidence that the horse-power development on the Chattahoochee river here in recent years and the number of trees set out by the municipality should be numerically the same, for there was no particular concert of action in the matter, but the incident illustrates rather strikingly that the effort to make Columbus the greatest industrial center of the South by reason of its cheap water-power is paralleled by an equally earnest effort to make this city a spot of beauty that will be the pleasure of residents and a delight to visitors. The city government has carried out its tree-planting campaign very systematically. On street after street long rows of Lombardy poplars, silver maples and other trees have been set out, and these, with the thousands of oaks and elms of older growth, make the residential streets of Columbus long vistas of verdure and beauty.

Last year the street committee of City Council planted over 2000 shade trees, and this year the tree-planting campaign is proceeding with equal vigor.

FEDERAL AID TO SCHOOLS.

[Hon. Allen D. Candler in Atlanta Constitution.]

I have read with much interest in Sunday's *Constitution* an extract from the *MANUFACTURERS' RECORD* and your comment on the same under the caption "Not Stagnation, But Progress."

It is seldom that I have had to differ radically from the *Constitution* on any important question, but on this I cannot

agree with it. I have always been an ardent advocate of the education of the masses, and still am, but there is such a thing as "paying too much for the whistle," and this is a case in which, if your policy is adopted, we would pay too much. The Federal Government was formed to do for the people only those things which it can do for them better than the individual States can. Education of the masses was not one of the objects of its formation. The States and local communities can do this better and more satisfactorily than the general Government. The truth is that there has been for nearly 50 years a studied and well-directed effort on the part of that political party which has been in control of federal affairs to concentrate in the Federal Government powers never delegated to it. Every means has been resorted to to accomplish this end, and that bait of federal aid to education is one of the means relied on.

Let the Southern people swallow this bait, and in a few short years our common schools will be completely controlled by the bureau of education at Washington, and this bureau will be dominated by the general education board and Ogedenism. The people who inaugurated this board and its hysterical crusade against illiteracy in the South may be honest and desire to stamp out illiteracy, but they are, at the same time, the tools of others who are educated only by a desire to do through this same means what they failed to do in four years of bloody war—wipe out State lines. They care nothing for the education of the masses, but they want a consolidated government whose power shall be supreme. Some of these people show great partiality for the negro and think they love him, but they do not. They mistake their hatred for the Southern white man for love for the negro. Men in high official position have on many occasions made this fact manifest. For four years the writer had the honor to act as chairman of the committee on education in the National House of Representatives. As such he reported to the House and pressed to passage a bill to appropriate to the several States \$15,000 a year out of the proceeds of the sale of public lands for the benefit of their schools of agriculture. The Georgia Legislature accepted the donation, providing in the resolution of acceptance that the money should be divided "equitably between the two races." The Governor of Georgia asked me to collect the money for the State. When I went to the Secretary of the Interior for the proper papers on which to draw the money from the treasury he objected to the word "equitably" in the resolution of the Legislature, and insisted that it should be divided equally between the negro and the white schools. In vain I called his attention to the fact that an equal division would be unfair, because in point of numbers one race represented 52 per cent. of the population and the other 48 per cent. His only reply was: "I want it understood that where the negro in the South is concerned I am for the negro."

Again, for four sessions which I was at the head of this committee the somewhat famous "Blair bill," providing federal aid to education, came before my committee. The Republican members insisted on a provision that before any State could get any portion of the appropriation its Governor should submit to the bureau of education in Washington a list of all textbooks used in the schools of the State. The Democrats refused to report to a bureau in Washington, foreseeing to what it would lead; the Republicans refused to support the bill without such a provision, and thus the bill failed for four sessions.

Mr. Editor, whenever Georgia seeks and secures aid from the Federal Government

for her schools she thereby puts them under the control of the bureau of education in Washington, which will be dominated by Ogedenism, which will prescribe directly or indirectly the text-books to be studied, and in two generations our descendants will, under such training, believe those of us who battled for the preservation of the Constitution as given us by our fathers were "traitors" engaged in "a wicked and unprovoked rebellion." We cannot afford to pay such a price for federal aid. Our percentage of illiteracy is great, but we are rapidly reducing it without federal aid. It is said that Georgia pays to the cause of education directly from her State treasury annually more money than any other State in the Union, and many schools supported by the State superintendent, supplemented by local taxation, are springing up all over the State. We should not, in considering the matter of illiteracy, lose sight of the fact that Georgia has within her borders more negroes than any other State in the world, and that two score years ago nearly one-half of our population were negroes, 99 per cent. of whom were wholly illiterate. Many of these same negroes are still included in our percentage of illiteracy.

It will not do to take the Morrill law as a precedent. This is a proposition to donate to the schools of the State out of the national treasury money wrung from the people by an onerous system of internal revenue and tariff taxation; that was a law to pay to each State for the use of its schools of agriculture and the mechanic arts money derived from the sale of the public lands, the property of the people of all the States, purchased with the blood and treasure of all the States. These lands, therefore, belong to the people, and are held by the Federal Government, not in fee simple, but only in trust, for the people of the States.

Let us "make haste slowly" in this matter, and not, Esau like, sell our birthright for a mess of pottage.

THE JUTE INDUSTRY.

[Charlotte (N. C.) Chronicle.]

What has become of the movement by the Southern farmers to substitute coarse cotton cloth for jute bagging? The way would be shown through that for an immense saving of money to the South. Mr. William Whittam, Jr., of this city, now engaged in special service for the Government, makes this clear in an article which is published in the Daily Consular and Trade Reports. Speaking of the jute industry, he says that British India controls the raw jute output of the world, and that country is fast reaching a position where it will dominate the manufactured product, if, indeed, she does not already do so. Considering conditions in the United States, and taking a broad view of the advisability of extending our manufacture of jute goods, one is confronted with a curious situation. In the face of a rapid erection of new mills in Calcutta and vicinity, Dundee, Scotland, maintains the volume of her output of such goods by her superior knowledge of the workable value of the fiber and the great skill of her operatives.

During the fiscal year ended June, 1906, the United States imported 103,945 tons of raw jute and jute butts, valued at \$6,449,684, and \$6,151,540 worth of this came from the East Indies. Gunny cloth and jute bagging suitable for covering cotton bales to the value of \$619,800 was entered in 1906. Jute bags worth \$2,432,383 and burlaps weighing 311,118,257 pounds, valued at \$20,083,938, were also imported last year, giving a total of \$23,139,121 worth of jute fabrics purchased by the United States for the fiscal period 1906. Burlaps being the item of greatest value, it is interesting to find that the East In-

dies sent us \$14,628,216 worth, while our purchases from the United Kingdom amounted to \$5,316,495. Following the usual course of new industries in countries hitherto mainly producers of raw materials rather than of finished goods, India seems to be manufacturing the cheaper grades of burlap. This is shown by the average prices per pound of American burlap imported from the United Kingdom and East India. We paid India an average of 5.99 cents a pound, while for our takings from Great Britain we paid 8.07 cents a pound. The substitution of cotton for jute would not only keep all this money at home, but would create a new demand for cotton, and every new demand for the staple helps the farmer.

CONCRETE.

[New York American.]

We are rapidly approaching the age of concrete. The life of the forests is limited. Another generation and the iron-ore fields in the Lake Superior region will be practically exhausted.

Already Europe has met the timber famine and the high price of steel and iron by building its cities of concrete. The modern parts of Milan, Berlin, Budapest and other cities growing at a tremendous rate are being constructed of concrete.

One of the finest bridges in the United States has just been completed at great cost across the Rock Creek ravine at the national capital. There is not a bit of iron in the whole gigantic structure. It was constructed of concrete blocks, and these were made out of gravel gathered from the bed of the gorge.

A new machine for the making of these building blocks of concrete has just been perfected which will enable three men to turn out 600 blocks of almost any desired size in a day. A downward motion of the press lever applies 60,000 pounds pressure to the moist material.

The importance of the use of concrete is that the supply is inexhaustible, and many contractors are convinced that this manufactured stone will prove as durable as granite.

The practicability of substituting this artificial stone for steel and wood is sufficiently reassuring so far as the problem of the future housing of mankind is considered. It does not minimize the danger of destroying the forests on the watersheds. The crusade for the preservation of these woods that formerly so filtered the snows and rains that floods were averted in the valleys should receive national support.

PACIFIC SUPREMACY.

[Hartford (Conn.) Courant.]

Ex-Secretary Shaw has been telling an audience that there is sure to be a war for the supremacy of the Pacific. There is a vast trade across that ocean, and he assumes that it will be fought for. We assume the same thing, but there are different kinds of war. The kind he evidently refers to smells of gunpowder. The kind we look for is industrial and constructive, and not bloodthirsty and destructive.

The Atlantic has also a vast trade. Is that exclusively the property of one nation? Manifestly not. It is the subject of a constant warfare, but it is the warfare of economy, of sharpened wits and improved methods. There is no sane reason why the trade of the Pacific should not be the subject of the same international competition. Indeed, it already is so. The ports of the Far East see daily ships of the United States, England, Germany, France, Norway, as well as of Japan.

England is entrenched at Hongkong, Shanghai and other places, France has her possessions in lower China, Germany is over there and we are in Manila. All are engaged in the struggle for business.

The war is on, but it means buying and selling, and there is no shedding of blood. The easy way to bring on a war over there would be for us to let go of the Philippines. The people there would at once begin to fight with each other, and other nations would probably try to pick them up and would fight for the advantage which we had thrown away. Our being there is a reason for peace rather than for war.

There is as much sense in going gunning for the supremacy of the Atlantic as for that of the Pacific. It's too late for either pastime.

THE RISE IN PRICES.

[New York Evening Post.]

Complete data for the movement of English and American prices in 1906 are now at hand. For England, the index number computed annually by Mr. Sauerbeck rose from 72 to 77, or about 7 per cent.; while for this country the statistics of the Bureau of Labor show an advance from 115.9 to 122.4, an increase of 5.6 per cent. Mr. Sauerbeck's figures indicate that the rise of prices was most marked in the group of textile products, and least so in the group of food products. The tables of the Bureau of Labor show that metals and implements, lumber and building materials, with cloths and clothing, contributed most to the general upward movement. Since 1896 and 1897, when prices touched the lowest level, the movement of the index numbers in the two countries has been as follows:

| Year. | England. | U. S. | Year. | England. | U. S. |
|-----------|----------|-------|-----------|----------|-------|
| 1896..... | 61 | 90.4 | 1902..... | 69 | 112.9 |
| 1897..... | 62 | 89.7 | 1903..... | 69 | 113.6 |
| 1898..... | 64 | 93.4 | 1904..... | 70 | 113.0 |
| 1899..... | 68 | 101.7 | 1905..... | 72 | 115.9 |
| 1900..... | 75 | 110.5 | 1906..... | 77 | 122.4 |
| 1901..... | 70 | 108.5 | | | |

Clearly enough, the reactionary tendencies which kept the general average nearly stationary from 1900 to 1904 have spent their force, and prices are now advancing with great rapidity. Since 1896, English prices have risen 26.2 per cent., while American prices have increased not less than 35.4 per cent.

HOPS.

[New York Evening Mail.]

This country produces more hops than any other country except Germany. Great Britain stands third in the list. This State produces more hops than any other American State. It had 27,532 acres devoted to this crop in 1900 out of a total American acreage of 55,613, and it produced 17,332,340 pounds in a total American production of 49,209,704. In this State the industry is mainly confined to the counties of Franklin, Madison, Oneida, Otsego and Schoharie. In this country the industry is almost altogether confined to New York State and the Pacific slope States of Washington, Oregon and California. The latter have a larger yield per acre than the Empire State.

Any good corn land that is not subject to extreme heat or cold during the growing season is suitable for hops. This country has suitable areas large enough to supply the entire world's trade. The only difficulty in harvesting the crop is that it must be done by hand and requires large numbers of pickers for a few weeks in August and September. This is less of a problem in New York, however, than in the Western States, for here the hop yards are small, usually merely sections of farms on which other crops are raised.

England takes more of our hops than any other country. Indeed, it is the only old world country that will stand for them. There is a degree of faddism among beer brewers, and the gentlemen of the continent allege that the American article is of an inferior quality. Bohemian hops have the highest reputation

in the world's markets. The service of hops in brewing is chiefly to give beer its aroma and bitter taste. The Briton wants his drinks bitter and that is why he is the world's greatest hop consumer, but not its chief beer producer. For a barrel of beer holding 31 gallons the German will use half a pound of hops, the American five-sixths of a pound, the Frenchman a pound and the Briton a pound and a quarter. Everywhere, however, the taste is growing for milder brews.

The world's hop crop in 1905 was 277,000,000 pounds. According to quality, quantity and locality, the price varies from 7 to 24 cents a pound. There was a crop shortage last year. Speaking of hops brings one to beer. The *Farmers' Bulletin*, from which we derive the foregoing facts, reports a beer production in 1904 in the principal countries of 215,185,122 barrels. Germany stands in first place with about 60,000,000 barrels. The United States passed Briton two years ago, and is now only a few million barrels behind Germany as a brewing power.

FOR INDUSTRIAL SUICIDE.

[London (Eng.) *Iron and Coal Trades Review*.]

Some time ago an announcement was made in our columns that the iron trade of Great Britain had organized a federation of the existing trade organizations for the purpose of watching and taking action upon threatened and proposed parliamentary action. The flood of bills introduced into the House of Commons during the last session and the session now current has excited on the part of members of the iron trade serious apprehensions as to the future. This apprehension is intensified by the important part that labor members are taking, not only in the debates of the House, but also in shaping the course and character of legislation. * * * It would almost seem as if bills now being introduced are not in most cases called for, and as if their only apparent function is to more or less harass those who are engaged in manufacturing industry. The parliamentary bills that have been introduced during the last session include no fewer than 12 of this character. * * * One of the most uncalled-for, and therefore one of the most vexatious, bills hitherto introduced is that which proposes to require that all materials used in iron and steel works, and all products resulting therefrom, shall be subject to a system of weighing and measuring which must result in delaying the progress of manufacture and may lead to friction between employers and employed, not to speak of an increase of cost which, in ordinary times, the trade can ill afford. This bill is a labor proposal, and its avowed object is to enable the workmen to have the services of a check-weighman, as is now the custom in colliery operations. Existing methods, however, are generally found satisfactory, and few employers will be found ready to admit that there is any reasonable call for the proposed alteration of the cost of which varying estimates have been formed, ranging from 2d. to 6d. per ton. But it is possibly less the increase of cost than the inconvenience, delay, and general disturbance of organization that is likely to be felt in the iron and steel industries of the country if this bill become law.

We have spoken of this as a typical case of interference by labor with the interests of employers. Many similar cases might be quoted. A Home Office Departmental Committee is now going into the matter. There is some reason to fear that this course of procedure may be carried farther if left unchecked, but how is the brake to be applied? With their large majority in the House of Commons,

the Government are almost absolutely unfettered in their Parliamentary action, except where checks are interposed by the Constitution itself. It would be well if their energy in meddling with industrial interests were soon to find a new outlet, so far as trade is concerned.

TENDENCY IN PUBLIC SALARIES.

[Springfield (Mass.) *Republican*.]

One of the closing acts of the Illinois Legislature, which adjourned without day last week, was to raise the salaries of state officers all around and sweepingly—the Governor being lifted from \$6000 to \$12,000, Lieutenant-Governor from \$1300 to \$2500, Secretary of State \$3500 to \$7500, Auditor from \$3500 to \$7500, Treasurer from \$3500 to \$10,000, Superintendent of Public Instruction from \$3500 to \$7500, and Attorney-General from \$3500 to \$10,000. As the Massachusetts Legislature is still in session and disposed to spend money liberally, the news from Illinois is to be published hereabouts with great hesitation, for the Governor of Massachusetts is now paid only \$8000, Lieutenant-Governor \$2000, Secretary of State \$3500, Treasurer \$5000, Auditor \$3500 and Attorney-General \$5000. However, it is a little late for the contagion to spread beyond Illinois so far as this at present; and the State tax, already rising to \$4,000,000 and more, may be spared large addition on account of salary increases.

The recent increase in salaries of Vice-President of the United States, cabinet officers and members of Congress was justified on account of increased cost of living in Washington and the country generally; and this sweeping raise in Illinois public salaries is presumably defended on the same ground as well as because of the growth of the State in population and wealth. It is to be noticed, however, that public salaries which are advanced during the time of inflation are rarely reduced in times of reaction and declining costs of living, and the tendency accordingly is pretty continuously upward. For example, take the salary attached to the Governor's office in the following States at different times as far back as before the Civil War:

| | 1907. | 1873. | 1869. |
|--------------------|---------|---------|---------|
| Massachusetts..... | \$8,000 | \$5,000 | \$3,500 |
| Connecticut..... | 4,000 | 2,000 | 1,100 |
| New York..... | 10,000 | 4,000 | 4,000 |
| Pennsylvania..... | 10,000 | 5,000 | 4,000 |
| Ohio..... | 8,000 | 4,000 | 1,800 |
| Illinois..... | 6,000 | 5,000 | 1,500 |

The currency inflation period following the Civil War, with its attendant rise of prices and high cost of living, brought about a very general increase in public salaries—New York forming the only exception to the rule in the above table, though it is to be remarked that that State went to \$10,000 for its Governor a year or two later than 1873, when the flush times gave way to great business depression; and most of the salaries then advanced stayed so and became the basis for another uplift during the industrial revival of later years. Massachusetts formed an exception—the Governor's salary being put back to \$4000 for a time under the influence of the campaign for economy begun by Gov. Talbot in 1879, later being raised again to \$5000, and then to the present figure.

TEXAS SHEEP-RAISING.

[New York *Commercial*.]

In 1882 and 1883, just after the subsiding of the cattle boom, the people of Texas went wild over sheep. Men who had never owned a sheep bought flocks, and men who owned thousands bought more. They figured out enormous profits, but in the end it came to them as a losing truth that while figures cannot lie, liars can figure. The figuring went this way: Start in with a flock of 100 ewes, 80 per cent. of which will drop lambs, and half of the

lambs will be ewes. At the end of a year the flock is increased to 140 ewes and 40 rams (or wethers). The wool averages eight pounds, worth 25 cents a pound, or \$2 per head, at total half as much for the lambs. The wethers can be sold for \$3 or \$4 a head, say \$140 for the 40, making a total income of \$440. That wasn't much for the first year, but it was supposed the man who was doing this had started in on a small scale and was going to build up a large flock. So he estimated that he would begin his second year with 140 bearing sheep, which, in turn, would yield him 80 per cent. lambs, or 112 head, half being ewes. He was supposed to clear up about \$600 the second year and start in the third year with 196 head, and at this rate in five or six years he would have 2000 or 3000 head, bringing in from their wool and their increase a comfortable income of \$5000 or \$6000 a year.

No account was taken of the cost of keeping the sheep. That was the day of free grass, when millions of acres were free to the appropriator of the pasturage. And no account was taken of losses, which were bound to be heavy where no provision was made for protection or subsistence through the winter except that offered by the open prairie. Some of the investors in sheep—a great many of them, in fact—found at the end of the second winter that instead of an 80 per cent. increase they had an 80 per cent. death loss.

In 1884 Texas had more than 9,000,000 sheep. The number now in the State, as rendered by the assessors, is about 1,250,000. The chief end of the sheep in Texas has been the production of wool. When the price of wool went down from 25 or 30 cents a pound to 10 or 12 cents the wool-producing sheep ceased to be profitable, and being no longer a source of profit, then owners began getting rid of them. In that way the 9,000,000 and odd head were reduced to 1,250,000.

The tide has had its ebb, and the flow has set in. Sheep are worth as much now as they were in 1883, or more. Wool is bringing good prices. Having become a money-maker again, the sheep will become as popular as he was before, and many will begin to raise sheep, and count their profits before the shearing is done.

A discouraging feature of the existing condition is the lack of quality in the sheep. Cattle-raisers have, in the two decades since 1883, bred up their herds until the old long-horn is a rare animal. The average herd of Texas cattle now weighs fully 50 per cent. more than the average herd of like age did in 1883. Good breeding has done it. Sheep weigh no more, and produce no more wool per head, than they did then. Men who have bred good sheep have found always a good market for them and for their wool. At the Fort Worth stockyards high-grade mutton sheep are now readily salable at \$5 to \$5.50 per hundredweight, and such sheep average above 100 pounds.

The Temple (Texas) Commercial Club has been organized with Messrs. A. J. Jarrell, president; F. F. Downs and Charles M. Campbell, vice-presidents; K. K. Hooper, secretary pro tem., and A. J. Jarrell, Charles M. Campbell, W. W. Hair, F. F. Downs, A. F. Bentley, F. P. Hamill and K. K. Hooper, board of directors.

The Chamber of Commerce of Washington, D. C., has been organized with Messrs. Robert N. Harper, president; James F. Oyster, first vice-president, and Charles J. Bell, second vice-president. This organization succeeds both the Business Men's Association and the Jobbers' and Shippers' Association.

If you wish to keep posted on the progress of the South, read the MANUFACTURERS' RECORD. Price \$4 a year.

TEXTILES

[A complete record of new textile enterprises in the South will be found in the Construction Department.]

Correspondence relating to textile matters, especially to the cotton-mill interests of the South, and items of news about new mills or enlargements, special contracts for goods, market conditions, etc., are invited by the MANUFACTURERS' RECORD. We shall be glad to have such matter at all times, and also to have any general discussion relating to cotton matters.

To Train in Textiles.

[Special Cor. Manufacturers' Record.]

Spray, N. C., May 20.

Promoters of the proposed Spray School of Technology, toward which the State Legislature has made an appropriation of \$5000 per annum, propose to build and equip the institution at a cost of not under \$20,000 and to provide as many scholarships as there are members in the lower house of the State Legislature, these scholarships carrying free tuition and the guarantee of enough work to defray the students' current expenses. Each legislator has the privilege of appointing one student from his district or county, who will be benefited by the scholarships above described.

Owing to the scarcity of well-trained and competent textile men, and to the fact that no such school is now in reach of the poorest boy, the idea of establishing a school as outlined formulated itself in the fertile mind of Mr. B. Frank Mebane. Spray naturally presented itself as a suitable location for a textile school, being a progressive town of 8000 inhabitants, having diversified interests in cotton and wool manufacturing establishments and destined to become a leading manufacturing center in the South of its kind. The doors of the mills will be thrown open to the students of the proposed school, and they will have such opportunities as no other school in this country affords. The natural inclination of each student will be fostered, and under the watchful eyes of the school authorities, the mill managers, the talents and turns of the pupils will be developed. The textile industry of the South needs badly just such an institution today, and its birth should be welcomed by all interested in this line of work.

The projectors of this school propose further to educate and equip young men who can compete with foreign commercial salesmen in the South American and similar markets. The day is near at hand when the United States must of necessity control the trade of the Western Hemisphere, and immediate steps must be taken toward this end.

Viewing the scheme of the school from a philanthropic standpoint, it has an attractive feature that will and cannot fail to appeal to every good citizen. Commercially speaking, it is an institution that the country and State needs, and it will succeed and do good.

American Cotton Manufacturers.

Successful in its every feature, the convention held in Philadelphia last week by the American Cotton Manufacturers' Association will long be remembered as the best attended and most important ever held. Coming at the close of the first decade of the association's life, it was a fitting celebration of the rapid growth both in membership and importance which has been attained since its organization in Charlotte, N. C., in 1897. There was a gain in membership during the past year of 477, bringing the total membership up to 1056, this being about equally divided between Northern and Southern manufacturers.

The following officers were elected for the coming year: President, S. B. Tan-

ner, Henrietta, N. C.; vice-president, T. H. Rennie, Graniteville, S. C.; secretary and treasurer, C. B. Bryant, Charlotte, N. C.; chairman board of governors, T. Ashby Blythe, Philadelphia, Pa., and new members of the board of governors, Ellison A. Smythe, Greenville, S. C.; Frederick A. Flather, Boston, Mass.; D. Y. Cooper, Henderson, N. C.; E. Chappell, Atlanta, Ga.; Leonard Paulson, New York, and M. M. McCall, Opelika, Ala.

One of the important matters which was referred to by a number of those addressing the convention was that looking to a possible future consolidation of the American Cotton Manufacturers' Association and the National Cotton Manufacturers' Association. While no definite action was taken to bring about such a coalition, it was easily seen that this sentiment is growing rapidly, and as many cotton manufacturers are members of both associations, there is every reason to believe that this will eventually be brought about. Both of these associations have been productive of much good in creating a better understanding among cotton manufacturers and allied interests generally, and the welding together of these bodies in the interest of a common cause would give the consolidated body greater strength both in number and importance and necessarily enable it to wield greater influence in furthering the interests of the whole industry, and would make it an organization second to none in the country in importance.

Directory of Textile Interests.

The American textile industry and its allied branches have been increasing steadily in importance and extent during recent years, especially in the Southern States. It is now extremely comprehensive, including the manufacture of practically every class of textile product, which is supplying the markets of this country and of other countries in various parts of the world. An interesting publication in this connection is the directory which Messrs. C. A. Dockman & Co. of Boston, Mass., have been issuing since 1866. The 1907 edition is now being distributed, and its contents include a variety of textile information of value for all who have to conduct business negotiations of any character with cotton, wool, silk, jute and linen manufacturers, the dry goods trade, commission merchants, textile machinery and supply manufacturers, and others. The United States, Canada and Mexico are all included in the data which Dockman's book presents, and the information is thorough, being prepared from reports of the various individuals, firms and corporations considered. Tables indicating the extent of the industry in the various States are included in the book's contents.

The Elizabeth Mills.

The Elizabeth Mills of Charlotte, N. C., has decided affirmatively the recently-mentioned proposition to enlarge its plant. The company will erect an additional building 75x182 feet and equip it with 6000 spindles, thus about doubling present plant, and will continue to manufacture high-grade carded and combed yarns from 50s to 80s in peeler and Egyptian cotton. Contracts have been awarded for the machinery needed except possibly two 75-horse-power motors for driving the new equipment. These mill betterments will cost upwards of \$100,000.

Carolina Mills to Enlarge.

The Carolina Mills of Greenville, S. C., will add 5000 spindles, 150 looms and complement of pickers, slubbers, intermediates and roving machines to present plant, now operating about 6000 spindles and 176

looms. The Lowell (Mass.) Machine Shop has contract for the picking, slubbing, intermediate and roving machinery; Mason Machine Works of Taunton, Mass., the cards and spinning; Curtis & Marble Machine Co. of Worcester Mass., the cloth-room machinery, and the Draper Company of Hopedale, Mass., the looms. Electricity will be used for motive power, the current being furnished by the Greenville-Carolina Power Co. Messrs. Lockwood, Greene & Co., 93 Federal street, Boston, Mass., and Greenville, S. C., are the engineers in charge, and expect to have the addition to plant ready for operation by January, 1908.

Textile Notes.

Messrs. A. F. Ruff, W. H. Harriss and W. S. Adams are reported as to establish a textile mill.

The Cora Cotton Mills of Kings Mountain, N. C., contemplates making additions to its present plant, which is operating 10,560 spindles.

It is reported that the High Shoals Company of High Shoals, N. C., has decided to add 5000 spindles to its present equipment of 11,000 spindles and 470 looms.

Corsicana.

[Special Cor. Manufacturers' Record.]
Corsicana, Texas, May 18.

An election was held in Corsicana yesterday and carried by a good majority for the issue of \$15,000 40-year 4 per cent. bonds. The issue is made for the purpose of purchasing for the city the Convent property, which is to be used for the city schools. Option to pay the bonds in 15 years will be reserved.

C. A. Benton has purchased the land and will at once install an up-to-date brick plant, using the best modern machinery. The material for brickmaking is of a superior quality here. The plant will be located on the Houston & Texas Central Railway one mile south of the city.

Messrs. J. B. Rowland, J. R. Gentry and others have leases on 300 acres of land in the Powell oil field here, and have completed one good well and will at once drill others.

Bell White of Corsicana is drilling for oil about five miles southeast of here, and hopes to bring in some good wells. This territory is very promising, as oil has been found on the adjoining land.

S. W. Bogy.

The Farmers' Union Co-operative Oil Mill Co. of Guthrie, O. T., has been incorporated with a capital stock of \$100,000. Incorporators of the company include Messrs. E. S. Elliott, John Devereux, J. C. Wicke and associates.

A party of New Orleans business men, headed by Mr. M. H. Trezevant, returned last week from a trip to the canal zone under a conviction that a change to be made in the handling of commissary supplies for the Panama Canal workers will be to the benefit of Southern cities.

The Commercial Club of Birmingham, Ala., has elected Messrs. Sterling A. Wood, president, and M. V. Joseph, T. O. Smith, T. G. Bush, Robert Jemison, Jr., E. W. Barrett, J. B. Gibson, F. W. Dixon, J. L. Kaul, J. W. Sibley, R. M. Goodall, W. P. G. Harding and James Rowron, vice-presidents.

The new steamer which is being built at Sparrows Point, Md., for the Old Bay Line will be named Florida. She is to be launched in July. The builder is the Maryland Steel Co. The new vessel will accommodate 450 passengers and will be larger than any of the boats now in the company's fleet.

PHOSPHATES

Tennessee Fertilizer.

In a paper read before the Nashville (Tenn.) Manufacturers and Producers' Association by W. D. Rhea on the history of the fertilizer industry the writer, referring especially to the fertilizer industry of Nashville, Tenn., said that its history reaches back over a quarter of a century, dating from the organization of the National Fertilizer Co. in 1881, and until 1893 all the phosphate rock used by this company was brought from South Carolina. In 1893 the discovery of the blue rock in Maury county almost simultaneously by several prospectors opened new possibilities for Tennessee in the fertilizer field. Much capital was invested in what was known as the Centerville district, and the commercial exploitation of these fields began on a large scale. Three years after the discovery of the blue rock it is stated that a higher grade of brown rock was discovered at Mt. Pleasant, the latter discovery being followed in rapid succession by the finding of brown rock in Davidson, Sumner, Giles, Williamson, Wilson and Hickman counties, none, however, equaling the Maury county deposits and white rock in Perry and Decatur counties.

Among the Nashville companies that were active in the development of the industry Mr. Rhea referred to the Read Phosphate Co., which was followed by the Tennessee Chemical Co., Armour Fertilizer Co., the Federal Chemical Co. and the Interstate Phosphate Co., the last-named having constructed its plant last year. Messrs. Singer & Johnson also operate a plant in the vicinity of Nashville, and Armour & Co. are said to be preparing plans for a large and modern plant in West Nashville. With the exception of one of the smaller companies, Mr. Rhea says that practically all of the capital invested in the industry in Nashville is furnished by residents of other States. He estimates that the industry in Nashville has an invested capital of \$3,000,000; annual pay-roll of \$175,000; annual salaries of \$60,000; men employed, 800; total output 150,000 tons, valued at \$2,250,000, and furnishes an annual revenue to the railroads of \$600,000. In discussing the fertilizer industries he reviewed the phosphate-rock interests by saying that the Independent Phosphate Co., which has its offices in West Nashville, owns 3000 acres of land in Maury and Hickman counties, valued at \$1,000,000. It expects to produce 160,000 tons of rock annually from its four proposed plants. Reference was also made to the Paragon Phosphate Co., composed entirely of Nashville men, and to the Charleston Mining & Manufacturing Co. He concludes his paper by stating that prices for the finished product are satisfactory, freight rates to and from Nashville are equitable, and labor fairly plentiful. The greatest drawback that producers have had to contend with during the year, he says, has been a disastrous car shortage.

Sand and Fertilizer Plant.

The MANUFACTURERS' RECORD is in receipt of authentic information regarding the Union Sand & Fertilizer Co., P. O. Box 482, Clarksburg, W. Va., of which Mr. David M. Morris is the promoter and general manager. It is the purpose of the company to crush sand from rock for building purposes and to manufacture commercial fertilizers, the plant to have a capacity of about 100 tons of sand per day and 10,000 tons of fertilizer per year. The main structure will be of iron and wood, 36x72 feet, with an L 24x36 feet, equipped with engines, boilers, elevators, crushing machinery, etc. There will be added large sheds for storing, bagging and shipping fertilizers and fertilizer materials, the

total cost of the plant to be approximately \$25,000. At a later date the company will probably install electrical equipment. It desires quotations on machinery used in the manufacture of fertilizers, and on crusher rolls for crushing sandrock, and states also that it needs the services of a first-class superintendent for the fertilizer department. Officers of the company are Messrs. James T. Drudy, president and treasurer; J. H. Irving, secretary, and David M. Morris, general manager. The architect and engineer for the erection of the plant has not been selected as yet.

To Erect Fertilizer Plant.

Contracts have been signed, it is said, for the erection of several structures for the proposed fertilizer factory of Messrs. Wilcox, Ives & Co. at Savannah, Ga. The buildings will be erected by Peter Raby, and will include a manufacturing shed of frame construction, 330x150 feet, to contain offices and storerooms. Another frame structure will be erected for the storage of nitre, and railroad tracks will be constructed along the side of the buildings for transportation facilities. Modern equipment will be installed.

Phosphate Through Punta Gorda.

A report of shipments of Peace River phosphate rock made by the Peace River Phosphate Mining Co. through the port of Punta Gorda, Fla., during the month of April shows that a total of 5214 tons were shipped. Three cargoes went out, one each to Norfolk, Va.; Philadelphia, Pa., and Baltimore, Md. Total shipments for the year amount to 15,734 tons.

Phosphate from Savannah.

According to the monthly report of Messrs. J. M. Lang & Co. of Savannah, Ga., shipments of phosphate rock made through that port during April amounted to 17,185 tons. Cargoes went to Bremen, Rotterdam, Wagon, Liverpool and Hamburg, the shipments being made by the Dutton Phosphate Co.

The Tennessee Valley Phosphate Co. of New York city has been incorporated with a capital stock of \$150,000 by Messrs. H. C. Powers, 34 Pine street; Richard W. Hubbell, 45 Wall street, and Louis F. Dodd, 52 Broadway, all of New York.

MINING

Marble in South Carolina.

A report from Anderson, S. C., makes reference to a marble deposit on Poor mountain which is said to be of excellent quality and could be easily developed if railroad facilities were had. Specimens are on exhibition at the office of Messrs. Frank & Evans at Anderson, S. C.

New River Loading.

Coal loading in the New River field for the month of April amounted to 492,410 tons, a decrease as compared with the loading for March of about 50,000 tons. Shipments to tidewater amounted to 6925 cars. Coke shipments during the month aggregated 782 cars.

New Orleans' City Hall.

Contract was awarded last week for the erection of the new City Hall for New Orleans, La. It was given to the Congress Construction Co., offices in the Hartford Building, Chicago, Ill., and involves an expenditure of about \$250,000. The building will be of steel frame and concrete, fireproof, six stories high, 112x900 feet in size, plans and specifications by Messrs. Dibold & Owen of New Orleans. A low-pressure vacuum system will furnish the heating for the structure. Electricity will furnish the lighting and the power for the elevator service.

RAILROADS

[A complete record of all new railroad building in the South will be found in the Construction Department.]

NEW LINES BUILDING.

Contract for Baton Rouge, Hammond & Eastern Railway Is Let.

The Baton Rouge, Hammond & Eastern Railroad Co., which proposes to build a line from Baton Rouge to Hammond, La., 43 miles, and from Hammond to Covington, La., 23 miles, has let a construction contract to John Scott & Sons of St. Louis. C. H. Fisk, chief engineer, will superintend the building of this line, which will run through a timber region that is expected to furnish a large amount of lumber for freight. After constructing this section it is expected to continue the road to a connection with the New Orleans & Northeastern Railway. Work under the contract just awarded between Baton Rouge and Hammond is to be rushed, as it must be completed by January 1 next. On the other part of the line contract is soon to be let. The road is to connect with the Colorado Southern, New Orleans & Pacific, the Texas & Pacific Railway, and also with the Southern Pacific roads in Louisiana.

Another lumber road, the New Orleans Great Northern, is pushing work in Mississippi, and N. G. Pearsall, general manager, is reported as saying that the grading from Monticello to Jackson, Miss., the latter being the northern terminus, will be completed by July 1, and that this extension will be ready for operation by September. The recent death of Mr. Frank H. Goodyear, president, will not, it is stated, in any way delay or interfere with the plans of the company and its work. It is further said that the Columbia branch will be extended to either Gulfport or Pascagoula, Miss., although this report does not indicate that early construction on that line may be expected. The big lumber plant at Bogalusa, which has a capacity of 600,000 feet per day, and which is owned by the Goodyear interests, will provide an immense business for the road in addition to other traffic. The branches to Tylertown and Mandeville are also being pushed. It is said that the lumber interests of the Goodyear company have enough standing timber to keep the Bogalusa plant running for 35 years. There has been talk of an extension beyond Jackson, but as yet the officials of the railroad have divulged nothing concerning it.

The Atlanta, Birmingham & Atlantic Railway, which runs through lumber and mineral regions in Georgia and Alabama, is making rapid progress in the building of its Birmingham extension, and P. S. Arkwright, vice-president, is reported as saying that by next spring it is expected to operate trains in and out of Birmingham. Some extensive mineral properties owned by the same interests are to be developed by this road. The company has lately decided to purchase a large amount of rolling stock, amounting to nearly 1800 freight cars.

New Equipment, Rails, Etc.

The Fort Worth & Denver City Railway is reported to have purchased from the Pullman Company 900 box cars, 12 passenger cars and 4 baggage cars at a total cost of \$950,640, of which \$791,280 was for the box cars.

An officer of the Mobile & Ohio Railroad is quoted as saying that the company has ordered from the American Car & Foundry Co. 1000 box cars of 60,000 pounds capacity and 750 drop-end gondola cars of 80,000 pounds capacity, all to be delivered in September. The company has also ordered from the Baldwin Locomotive Works

20 10-wheel locomotives for delivery in October.

The Wichita Falls & Southern Railway Co. has, it is reported, ordered from the Cambria Steel Co. sufficient steel rails to lay 50 miles of track.

The Atlantic Coast Line has ordered from the American Bridge Co. 1400 tons of steel bridge work.

Bond Bros. of Bond, Md., have purchased an 80-ton locomotive and a passenger car for their lumber railroad.

The Texas Traction Co., which is building the Dallas and Sherman interurban railway, is reported to have ordered rails and equipment, this being done by the Fred A. Jones Company, contractors for building and equipping the line.

The Chicago & Alton Railroad Co., it is reported, will make a practical test of three gasoline electric motor cars invented by W. B. Strang.

The Rock Island system is reported to have ordered 25,000 tons of steel rails from the Illinois Steel Co.

The Midland Valley Railroad has, it is reported, let a contract to the Mt. Vernon Car & Manufacturing Co. for 250 box cars and 500 coal cars. It has also ordered from the Baldwin Locomotive Works 5 consolidation, 3 eight-wheel, 1 10-wheel and 1 switching engine.

Reported that the Louisiana Railway & Navigation Co. has ordered 500 wooden box cars of 60,000 pounds capacity from the Western Steel Car & Foundry Co.

The St. Louis, Springfield & Oklahoma Western Railway, it is reported, will be ready to purchase equipment within two months. C. S. Stocker of Stigler, I. T., is president.

The Illinois Central Railroad has given a contract to the American Car & Foundry Co. for 500 steel dump cars of 50 tons capacity. It has also ordered from the Pullman Company two dining cars.

The Illinois Central Railroad, it is reported, will build at its own shops 400 box cars.

The Wrightsville & Tennille Railway, it is reported, has ordered from the Baldwin Locomotive Works 1 locomotive.

The Charleston & Western Carolina Railway has ordered 4 locomotives from the Baldwin Works.

The Long-Bell Lumber Co. of Kansas City, Mo., operating lines in Louisiana, has ordered 2 locomotives from the Baldwin Works.

The Atlantic Coast Line is reported to have ordered 50 gondola cars of 80,000 pounds capacity from the Hicks Locomotive and Car Works.

The Pennsylvania Railroad's order for all-steel passenger equipment consists of 150 passenger cars, 20 baggage cars and 5 combination passenger and baggage cars. The American Car & Foundry Co. will build 90 of the passenger cars, and the rest will be built by the Pressed Steel Car Co. The railroad company also proposes to build 5 steel passenger cars at its own shops.

TERMINAL AT WILMINGTON.

South & Western Business to Go There Over the Seaboard Air Line.

The Seaboard Air Line Railway is preparing to handle business from the South & Western Railway, which is expected to be completed in about a year from Elkhorn City, Ky., to a connection with the Seaboard in the western part of North Carolina.

President W. A. Garrett of the Seaboard, according to a report from Charlotte, N. C., said while in that city that the company would make Wilmington, N. C., the seaport terminal for the coal and other freight received by the Seaboard from the South & Western, and that it did not expect to build a line from Wilmington to Southport, N. C., and make

the terminal there. The Seaboard is now making extensive improvements at Wilmington, and it will also provide ample yards and other facilities at the connection with the South & Western. The point of connection, it seems, has not been definitely determined, at least for announcement by the railroad company, but it is supposed it will be somewhere between Mt. Holly and Shelby, N. C.

Some time ago the Seaboard Air Line purchased additional land on the waterfront at Wilmington, indicating an intention to expand its terminals there and not to go to Southport, which it was expected and rumored would be the terminal on the Atlantic for the South & Western business. The Seaboard is also improving its old line between Hamlet and Wilmington, N. C., putting it in shape to handle heavy traffic when the time shall arrive for doing so.

Gotebo to Frederick.

Mr. H. E. Colby writes from Gotebo, O. T., to the MANUFACTURERS' RECORD that the Gotebo & Southwestern Railway Co., recently chartered, has headquarters at Gotebo. Continuing, he says: "The names of the officers are as follows: Herbert E. Colby, president and general manager; John W. Onstott, first vice-president; Peter Richert, second vice-president; John J. Kiewer, auditor; Robert B. Wells, secretary and treasurer. The above-named persons are the present board of directors also. All live at Gotebo except Mr. Onstott, who resides at Cooperton, O. T. The charter calls for a line from Gotebo south to Frederick, O. T., 45 miles. Through Cooperton to the South, but the rest of the way has not been fully decided upon at this time.

"At present I am in charge of the business, and will probably look after the construction of the road. We connect with the Rock Island, Frisco, and with the branch of the Orient if they complete the road as proposed.

"The territory is the finest in this section of the country, rich and productive of all the regular farm products. There is no better opening for a good business in this territory. We are open for bids on the work now and for all the necessary material for its equipment. We expect to complete the first 14 miles of the road immediately, so as to connect Gotebo and Cooperton and assist in the transportation of the material necessary."

Would Provide Small Lines.

Messrs. Camp & Carnes, Lima, Ohio, write the MANUFACTURERS' RECORD thus:

"We find that your people in all parts of the South are very much alive, kind and co-operative, also most progressive, and we are doing all that can be done to join them in many industries. Just now one of the most needed in the entire South is better means of cheap transport of people and goods. We have given this problem much attention and find hundreds of regions rich with mineral, timber and soil, but at present totally lacking in outlet. We have, we believe, found a way to aid most of these regions if there is any hope for the people to aid themselves. Hence, if you will, kindly say to your people in all parts of the South that we court kind co-operation with the co-operative and can in most cases aid them out of their dilemma, and put in small industrial railroad lines which may be financed by domestic interests and made to develop into heavy lines by their own earnings, so developing many now far-remote regions into real hives of industry, profit and pleasure, to serve as feeders to our large lines and as trade to very many of our junction cities and towns.

"We have three calls not yet located for elm timber for cooperage plants; also

calls for sites in large cities for mattress factories. Furthermore, we want addresses of markets for cobalt, silver, lead, zinc and copper ores."

Connection for a Through Line.

Mr. E. W. Anderson, secretary of the Monroe Progressive League, Monroe, La., writes the MANUFACTURERS' RECORD concerning the proposed railroad connection which the League is endeavoring to have built. He says that the Tremont & Gulf Railroad begins at Tremont, west of Monroe, on the Vicksburg, Shreveport & Pacific Railway, and runs down to Winnfield, La. It could be connected by a new line seven miles long with the Monroe & Southwestern Railway, locally known as the Bootleg Road, a small lumber line 20 miles long. The gap to be covered by rails is from a point on the Tremont & Gulf Line to the southern terminus of the Monroe & Southwestern. The Progressive League is endeavoring to induce the railroad companies to build the connection of seven miles and to operate through trains from Winnfield to Monroe, La.

Mr. Anderson adds: "We are in strong hopes of effecting this union, thus securing for Monroe another valuable feeder, traversing, as these lines do, the richest timber lands, and after the lands have been denuded they are very productive."

The headquarters of the Tremont & Gulf Railroad are at Eros, La., and those of the Monroe & Southwestern Railway are at Monroe, La.

TIDEWATER TO THE LAKES.

Rumors of a Connection Between the Rogers and Ramsey Roads.

An interesting report in connection with the Tidewater and Deepwater railways is to the effect that the Lorain, Ashland & Southern Railroad, which is being built by Joseph Ramsey, Jr., from Lorain, Ohio, southward, will furnish the desired connection of the Rogers road to the Lakes. Mr. Ramsey is reported as saying that his line and the Tidewater seem to be heading toward Gallipolis, Ohio, and he would welcome a connection with such a strong road as the Tidewater or the Virginian Railway, as it will hereafter be known. Such a connection would make the port of Lorain on Lake Erie a northern terminal of the Rogers line.

At Charleston, W. Va., there are rumors that the Short Line projected from that city to Parkersburg will become part of the Virginian Railway, but nothing has transpired to confirm this story.

PENSACOLA TO MOBILE.

Extension of a Railroad Will Provide a New Short Line.

President Henry McLaughlin of the Pensacola, Alabama & Tennessee Railroad, a line 26 miles long running from Pensacola, Fla., to Muscogee, Fla., is reported as saying that within the next nine months the road will be extended from a point near Muscogee to a point on Mobile bay, making a direct short line to Mobile, Ala. This will require the construction of about 40 miles of track, and, pending the building of a trestle across the bay to Mobile, passengers and freight will be conveyed by means of a ferry. It is said that the trains will be transported on barges.

President McLaughlin is further reported as saying that arrangements have been made to start the location survey on the first of June, and that the construction forces will follow immediately after the engineers. Contracts for rails and ties have been awarded.

Amarillo to Brownsville.

Col. Uriah Lott, who promoted the St. Louis, Brownsville & Mexico Railway three or four years ago, and which has

since been built, is in the field with another large railroad project, one, in fact, considerably greater. He proposes to build a railroad from Amarillo, Texas, which is in the northwestern part of that State, and on the Rock Island Railway, southeast to Brownsville, Texas, about 800 miles. The line would pass through Sisterdale, Fredericksburg, Mason, Brady, San Antonio, Pleasanton, Oakville and Kingsville, with a branch from Oakville to Beeville and Refugio. Chicago capitalists are said to be considering the plan, and it is expected that within two weeks the question of construction will be settled. If a favorable decision is made Colonel Lott is to superintend the building.

An Electric Railway Terminal.

The Oklahoma City Electric Railway Terminal Association has been chartered at Oklahoma City, O. T., for the purpose, it is said, of accommodating interurban electric railways and street railways operated by electricity with a terminal station and office building and terminal tracks. It is proposed to build a terminal on what is called the Indianapolis plan, and to have a train shed under which passengers may be transferred with protection from the weather. The terminal station and office building will require nearly a block of ground. The company's capital is \$1,000,000, and the incorporators are Guy V. McClure, Warren E. Moore, Carlos Combs, Fred S. Combs and J. J. Johnson, all of Oklahoma City.

New Station at Allendale.

Mr. A. A. Porter, engineer of roadway, Charleston & Western Carolina Railway Co., Augusta, Ga., writes the MANUFACTURERS' RECORD thus: "It is possible that we will make some terminal improvement at Spartanburg, S. C., during the coming summer, but our plans have not been fully decided upon.

"We are, however, contemplating building a brick combination passenger and freight depot and frame covered shed at Allendale, S. C., and are asking for bids on same. The brick part of the building is 40x133 feet, and the covered platform 40x96 feet.

"This building is to be a union station, and the Southern Railway is to make track changes at this point."

C. & O. Appointments.

President George W. Stevens of the Chesapeake & Ohio Railway Co. has issued a circular saying that in accordance with the revised organization, approved by the board of directors May 7, the offices of general counsel and passenger traffic manager are created, and the following appointments become effective June 1: Mr. Henry T. Wickham, general counsel, Mr. Henry Taylor, Jr., general solicitor, both at Richmond, Va.; Mr. H. W. Fuller, passenger traffic manager, Washington, D. C.; Mr. John D. Potts, general passenger agent, Mr. Wm. S. Bronson, assistant general passenger agent, both at Richmond, Va.

Ardmore to Byers.

President A. J. Davidson of the St. Louis & San Francisco Railroad, St. Louis, Mo., writes the MANUFACTURERS' RECORD that there is no foundation to the report that the company would build an extension from Ardmore, I. T., to Lawton, O. T. Surveys have been made for an extension from Ardmore to Byers, 64 miles. At Waarika the line would connect with the Rock Island. "Ultimately," says Mr. Davidson, "we shall probably construct this extension, but the matter has been indefinitely deferred on account of the present financial situation and other conditions."

Railroad Notes.

The Lake View Traction Co. has been organized at Memphis, Tenn., to build a line from Memphis to Lake View, and also to Clarksville, Miss. R. F. Tate is president and H. E. Craft is vice-president; W. A. Percy, general attorney.

The Maryland Electric Railways Co. proposes to use the single-phase electric system in the conversion of the Baltimore & Annapolis Short Line from steam to electric operation. An extension of several miles will be made from Clifford, on the Short Line, to give the company an independent entrance to Baltimore.

A statement read at the annual meeting of stockholders of the Kansas City Southern Railway, it is said, shows remarkable growth in net earnings. For the 10 months ended April 30 there was an increase of 20 per cent. in gross earnings, and this, taken in connection with a decrease in operating expenses, showed an increase of 99 per cent. in net earnings as compared with the corresponding period of the preceding fiscal year. Operating expenses, it is said, have been reduced from 74 per cent. to little more than 58½ per cent.

FOREIGN LETTERS

THE MANUFACTURERS' RECORD is so widely read in foreign countries that we are in constant receipt of many letters from all parts of the world. Some of these letters indicate the disposition of foreigners to buy American goods, and are therefore of interest to our readers.

Sugar Machinery, Motors for Cycles, Etc.

A. Karim Khan & Bro., Nihtor, District Bijnore, Cawnpore, India:

"We send list of articles which will find a ready market here: Cane juice evaporators, vacuum pans of one ton per strike and heating surface 55-50; open pans—Teaches, Witzel, Fletcher, etc.; motors for changing ordinary cycles to motor cycles; ceiling and table fans worked by spring or weight power; typewriters worked by keyboard, less than £3½ in price; ordinary kerosene incandescent-light burners, less than \$1; centrifugal sheets finer than 0.25x8.00 mm., sheet being 8 feet by 14 inches; best filter process for juice. Our price for motor attachment is \$75; if same is fitted to a cycle, \$25 extra. Above prices are f. o. b. Calcutta."

Adding Machines, Aerial Cables, Etc.

J. Cabeza, Camera Oficial, Comercio, Industria y Navegacion, Oviedo, Spain:

"I shall be under obligations if you will put me in communication with makers of machinery for tying sausages and puddings; also with the Universal Adding Machine Co. of St. Louis. I would also like to obtain prices and catalogues of aerial cable equipments for transporting materials at iron mines; want to handle 2000 tons of ore monthly." This correspondent refers to the difficulties of being required by American manufacturers to remit cash in advance and then not receiving the exact goods ordered, and invites a solution of the problem.

The mining laws of West Virginia as amended by the 1907 State Legislature have been compiled in pamphlet form by James W. Paul, chief of Department of Mines, and these, under the law, will be furnished by mine operators to every employee.

The hospitality committee of the Merchants and Manufacturers' Association of Baltimore is arranging for some informal entertainment of the 170 members of the Bankers' Association of Texas, who will spend seven or eight hours in Baltimore on June 21 on their sixth annual excursion.

LUMBER

[A complete record of new mills and building operations in the South will be found in the Construction Department.]

Erecting Lumber Mill.

The Georgia-Carolina Lumber Co., Baird Building, Pottsville, Pa., advises the MANUFACTURERS' RECORD with reference to the sawmill plant it is constructing at Central Junction, about four miles from Savannah, Ga. This company is capitalized at \$300,000, and will expend about \$100,000 in the construction and equipment of its plant, this to include sawmill structure 48x232 feet, planing mill 48x100 feet and drykilns 50x100 feet. The installation will consist of a band mill with gang and resaw, to have a capacity of from 75,000 to 100,000 feet of yellow-pine lumber and dimension material. Nearly all equipment has been contracted for, including cars and locomotives for a railroad to be operated in connection with the plant. The timber to be developed is located in the vicinity of Central Junction, between the Louisville road and the Ogeechee river, and operations are expected to begin within six months. Officers of the company are Messrs. E. L. Bullock, president; J. W. Beecher, general manager; William L. Shearer, treasurer, and M. H. Ziegler, superintendent. Mr. W. S. Boynton, R. F. D. No. 42, Louisville road, Savannah, Ga., is the engineer in charge of construction.

New Distillation Plant.

A report from Lake Charles, La., states that the Southland Turpentine Co. of New Orleans is making active preparations for the erection of its proposed turpentine distillation plant at Lake Charles. Plans for the structures have been prepared, and Treasurer Charles R. Phillips of the company will have personal supervision of its operation. The process to be employed is said to be a new one, and will utilize pine stumps and mill waste for turpentine and other products. Dr. Philip Asher of the Parkerson-Blake Company of New Orleans is the president of the Southland Turpentine Co.

Purchases Timber and Mill.

The purchase of the sawmill and timber properties of the Case-Fowler Lumber Co. at North Birmingham, Ala., by the McLean Lumber Co. of Buffalo, N. Y., has recently been announced. The transfer includes a hardwood lumber mill at North Birmingham and timber lands on the Tombigbee river, the mill having been constructed about two years ago. It is stated that the purchasing company already owns timber lands on the Tombigbee and Warrior rivers, and operates plants at Chattanooga and other cities.

Forest Survey for Kentucky.

State Agricultural Commissioner Hubert Vreeland of Kentucky and Senator J. W. Newman of Woodford county are making arrangements for a forest survey of the State in order to ascertain the amount and character of its timber. The expense of the survey, it is stated, will be borne in part by the United States Department of Agriculture, the State paying half the cost.

Hoe Handles Wanted.

The Sparks Hoe Co. of St. Marys, W. Va., wants a supply of hoe handles, and invites manufacturers to submit prices.

Alabama Lumbermen.

The May meeting of the Alabama Lumber Manufacturers' Association was held at the Exchange Hotel, Montgomery, last week. Reports of committees were re-

ceived and discussed, there being a discussion also of market conditions and the car and labor situation. President J. C. Williams presided at the meeting. The association will meet in June at Andalusia, Ala.

Studying Texas Timber.

The forest service of the Department of Agriculture is studying the growth of timber in Texas, especially the loblolly pine, and will compile statistics, it is said, as to its growth, the net production of lumber and its relation to the growth of other varieties of timber. Figures will also be prepared showing the shipments from the State and the amount consumed for home purposes.

Mobile's Building Operations.

During the fiscal year ended March 15 there were 334 building permits issued in Mobile, Ala., representing an expenditure of \$1,552,096. The permits were for five fireproof buildings having an estimated cost of \$928,810; 51 of brick and stone, costing about \$337,907, and 161 frame buildings, costing \$253,212, and 117 for alterations and repairs to cost \$32,167.

Lumber Notes.

The Mississippi Pine Association will meet at Hattiesburg, Miss., on June 5.

The British steamer Sikh cleared from Galveston, Texas, recently with a cargo of 1,450,799 claret staves for Bordeaux, France.

The National Lumber Manufacturers' Association will meet in annual convention at the Jamestown Exposition on May 28 and 29.

Mr. N. W. Nock of Onancock, Va., wants to have cut, hauled, sawed, racked and delivered to depot by contract about 1,250,000 feet of pine timber.

The Norwegian steamer Halford cleared from Jacksonville, Fla., last week with a cargo of 7000 barrels of rosin for St. Petersburg, Russia, the shipment being made by the Patterson Export Co.

The Nimmons & Bennett Company of Pine Bluff, Ark., announces the change of its title to the W. B. Nimmons Company. The latter will continue the operation of the extensive plant for manufacturing circled tight barrel heading.

The Jackson Naval Stores Co. of New Orleans, La., has elected the following officers for the ensuing year: President D. J. Gray, Biloxi, Miss.; vice-president, El. T. Hines, Biloxi, Miss., and secretary and treasurer, G. F. Mason, New Orleans, La.

Announcement is made that the Interior Department of the United States Government has withdrawn 608,000 acres of timber lands, principally in Montgomery and Polk counties and west of Hot Springs, Ark., for the proposed Arkansas national forest.

A dispatch from Scranton, Miss., states that the loading of steamers direct from the sawmills at Moss Point is causing a rapid increase in the commerce of the port. The British steamer South Wales is loading a cargo of 3,400,000 feet of square timber from the yards of the L. N. Dantzer Lumber Co., and the British steamer Brookwood will clear with a cargo of 2,000,000 feet of hewn timber.

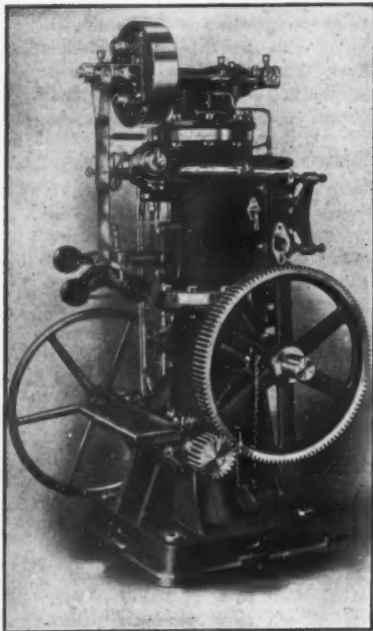
The Maryland Steel Co. of Sparrows Point, Md., was the lowest bidder at \$158,750 for 5000 tons of steel rails for railroad construction on the Isthmus of Panama. The bids were opened in Washington, D. C., by the purchasing agent of the Panama Canal Commission.

The Business Men's Association of Annapolis, Md., has elected Messrs. William H. Moss, president; N. P. Bethel, vice-president; Thomas J. Linthicum, secretary, and George F. Barton, treasurer.

MECHANICAL

Sturgess Water-Wheel Governors.

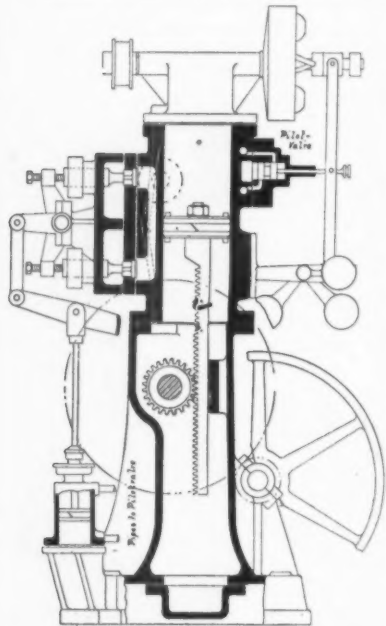
The continual improvement and advance in the equipment of hydro-electric plants is exemplified in the method of regulating the speed of the water-wheels. Not only is more accurate regulation demanded, but more strongly built governing apparatus and better engineering in its layout and



STURGESS WATER-WHEEL GOVERNOR.

relation to the water-wheel are required to meet modern standards. For too long have governors, even of the most expensive class, had the character and appearance of a prettily finished model, entirely incongruous in comparison with the solid and businesslike aspect of the rest of the power-house equipment.

A characteristic feature of Sturgess type "M" governors is that they are capable of operating continuously and under severe



SECTIONAL VIEW, STURGESS GOVERNOR

duty without needing constant care and overhauling.

A second and most important characteristic is the patented system of poppet valves for controlling the passage of high-pressure oil to the main cylinder. This system marks an important advance in water-wheel governors, for it is claimed to remove the well-known defects of piston valves of every type, and the cone-seated ground poppet valve will remain tight indefinitely.

The importance of the question of leakage is not confined to considerations connected with the valves themselves. It is a well-known fact that leakage is the principal cause for the breakdown (or disintegration) of the oil, causing the more volatile elements to be separated and leaving the heavier components to form a hard deposit throughout the governor system.

Sturgess poppet valves consist of four plain cone-seated valves, which are lifted off their seats at the right times, through the agency of an operating cylinder, the latter being controlled by the centrifugal governor and pilot valve. In such valves there is nothing analogous to lap on a piston valve, while the "seal" or surface constituting the joint is practically perfect. If, however, the valves do develop a leak they are easily reground with a little flour of emery in a very few minutes.

The piston-valve construction is retained in the pilot valve, which controls the operating cylinder. This valve, however, is quite small, and is made as hard as glass. The lap is one-sixty-fourth inch, and the valve is ground in place and subsequently lapped. Furthermore, the valve and liner are simple and inexpensive pieces to replace, if in the course of some years it is necessary.

A third important feature in these governors is the centrifugal governor, which is powerful and sensitive as well as having an adjustable feature of the greatest importance.

The crux of a water-wheel governor naturally lies in the centrifugal governor, for on the precision and delicacy of its motions does the action of the governor as a whole depend. No two plants require a centrifugal governor having the same characteristics. Sometimes a short deflection and pronounced equilibrium is required, while at other times a large flexible movement gives the best results. In the Sturgess centrifugal governor a wide range of adjustment in the above direction is obtainable by simply screwing the governor balls either on or off the supporting brackets and thus increasing or decreasing the leverage over the restraining springs.

The weights and springs are carried on hardened steel knife edges, while the sliding collars have imparted to them a circular as well as a longitudinal movement, the net result being a pure flotation of the balls in the correct position demanded by the speed and the elimination of all internal friction.

The concealed rack and pinion, by means of which the piston operates the main gate shaft, has the advantages that it is always perfectly lubricated, protected from dust or liability of damage and affords a neat design.

This rack and pinion, with the shaft, is from two to two and one-half times the diameter of the analogous parts found on other types of governors of like capacity. Besides the greater strength and area of bearing surfaces obtained, an important benefit arises from the better keying which the shaft affords. Loose keys in governors and other connections are usually a prolific source of trouble.

The compensator, or anti-racing device, as it is sometimes called, is of a simple and unique design which works perfectly. Being made much larger and having a far greater degree of motion when operating than similar devices on other governors, it is much easier to detect at a glance whether it is working correctly and is less liable to changes of adjustment due to variations in temperature, etc.

The strong points of the Sturgess type "M" governor may be therefore summed up as follows: Closely regulated, on account of the powerful knife-edge centrifugal governor and special arrangement of valves; work quick, on account of the free

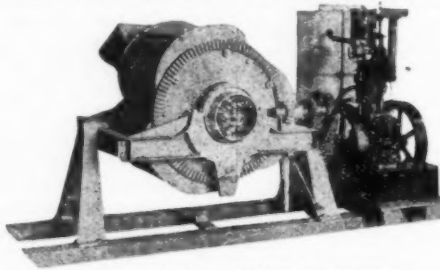
admission by poppet valves; will not race, on account of the perfect method of compensation; reliable, on account of the absence of delicate mechanism.

These governors are manufactured by the Sturgess Engineering Department, Ludlow Valve Manufacturing Co., Troy, N. Y.

"Clover Leaf" Concrete Mixer.

Concrete is now used so extensively in construction work of all kinds that information regarding improved concrete machinery is always timely. In view of this, attention is being called to the "Clover Leaf" concrete mixer, an illustration of which is presented herewith.

This mixer is not an experiment, but it is a practical machine. It is charged and



"CLOVER LEAF" CONCRETE MIXER.

discharged when in operation, no lessening of speed being necessary. The dumping is done by tilting the machine, and is easily accomplished, owing to the careful balancing of all parts.

The consistency of the batch may be readily determined at all times, being in full view and easily accessible to the operators.

There is no inside mechanism. The charge is allowed to pass freely over the inside of the mixing receptacle, and the angles, being in line of the movement of the materials, are constantly scoured by the action of the moving mass. The heavier and lighter aggregates will not become separated; the entire mass commingles during the process of mixing, assuring uniform concrete of the highest order, both as to the proportioning of the fine and coarser materials and the even distribution of the cement. The machine doubles over and scatters the mass each time of the passing up of the angle.

The unique form of the mixing receptacle insures a full and complete intermixing of the mass without the aid of appliances or mechanism of any description. The curves or angles of the drum double over the greater portion of the mass, the top going to the bottom and the bottom brought to the top, while the remainder is carried up by the same angles, aided by the centrifugal force, effectively distributing same the full width of the machine and over the portion previously doubled over, giving practically six distributions to the mass every revolution, allowing from 80 to 90 distributions per minute.

The mixing receptacle is oscillated from end to end twice each way each revolution of the machine, or from 50 to 60 end to end movements per minute. These end to end movements, together with the doubling over and carrying across of the concrete by the direct action of the machine, assures a most positive and thorough intermixing of the mass, and that in the minimum time.

For use in cement stone and brick plants the mixer is equipped with an appliance for conveying water to the mixing drum, a receptacle placed above and inside the charging hopper, to which is attached a perforated pipe extending inside the machine, allows an even distribution of water and the avoidance of slushing.

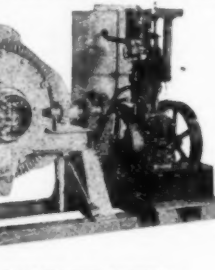
A section of the drum is so constructed that it may be readily removed, giving easy access to the whole of the inside of the mixing receptacle, that same may be

easily accessible for cleaning at any time when the machine is to be allowed to remain idle. This is a convenience that means a saving of time and labor, also materially extends the life of the machine.

The "Clover Leaf" concrete mixer is manufactured by the Williams Forest Machine Co. of South Bend, Ind.

"Peerless" Cement Brick Machine.

In 1906 the Peerless Brick Machine Co. decided that a medium-priced machine, with which one man could manufacture regular-sized brick from cement and sand, would find ready sale. As a result the "Peerless" cement brick machine was placed on the market. Since then it has been found that the machine is capable of



a much larger output than was at first supposed possible. It is claimed the machine will make 4000 bricks per day. This machine is now in general use, and the 1907 Peerless is built on the same general model as the 1906 machine, but it has been placed on a strong iron stand and some other slight improvements have been made.

A few good points of the Peerless machine are: Operated by one man; substantially made of iron and steel; brick made are uniform in size and have clean, sharp edges; brick are tamped by hand, which allows the air to escape; the steel on which the brick are faced is carefully planed, so that a smooth-faced brick is certain.

As the brick are tamped face down on a



"PEERLESS" CEMENT BRICK MACHINE.

smooth steel plate a rich mixture of any color desired can be sifted in for a face, then backed by a coarser and cheaper mixture, all tamped together and the brick delivered face up. The face brick thus produced when in a wall will have the appearance of pressed brick costing two or three times as much.

The Peerless Brick Machine Co., North 6th street, Minneapolis, Minn., manufactures the machine, an illustration of which is presented herewith.

The trustees and faculty of the University of Tennessee will celebrate the centennial of the founding of the University at Knoxville on June 1-4.

Construction Department

TO OUR READERS!

In order to understand and follow up properly the Construction Department items, please bear in mind the following statements:

EXPLANATORY.

The MANUFACTURERS' RECORD seeks to verify every item reported in its Construction Department by a full investigation and complete correspondence with everyone interested. But it is often impossible to do this before the item must be printed, or else lose its value as news. In such cases the statements are always made as "rumored" or "reported," and not as positive items of news. If our readers will note these points they will see the necessity of the discrimination, and they will avoid accepting as a certainty matters that we explicitly state are "reports" or "rumors" only. We are always glad to have our attention called to any errors that may occur.

* Means machinery, proposals or supplies are wanted, particulars of which will be found under head of "Machinery, Proposals and Supplies Wanted."

In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the MANUFACTURERS' RECORD.

ADDRESS FULLY.

To insure prompt delivery of communications about items reported in these columns, the name of one or more incorporators of a newly incorporated enterprise should be shown on the letter addressed to that town, or to the town of the individual sought, as may be shown in the item, as sometimes a communication merely addressed in the corporate or official name of a newly established company or enterprise cannot be delivered by the postmaster. This will help to insure prompt delivery of your communication, although it is inevitable that some failures on the part of the postal authorities to deliver mail to new concerns will occur.

WRITE DIRECTLY.

It is suggested to advertisers and readers that in communicating with individuals and firms reported in these columns, a letter written specifically about the matter reported is likely to receive quicker and surer attention than a mere circular.

ALABAMA.

Albertville, Ala. — Water-power Electric Plant.—It is reported the Alabama Railway & Power Co. (main office in Chattanooga, Tenn.) has purchased about 75 acres of land, including High Falls on Town creek, and will soon begin the development of the falls. It is proposed to build two dams across Town creek, furnishing about 2200 horsepower, which will be used to operate an electric railway between Chattanooga and Birmingham via Albertville.

Anniston, Ala. — Locomotive Works.—Reported the Kilby Locomotive & Machine Works has received \$5000 worth of new machinery and will build new power-house 70x100 feet, plant to be operated by electricity; also to double the present output of works, providing a daily capacity of eight cars.

Anniston, Ala. — Bridge.—Commissioner's Court, M. R. Coker, commissioner, will receive bids until June 3 for construction of bridge across the Ohatchie river.*

Billingsley, Ala. — Lumber.—Carter Lumber Co. incorporated by W. W. Carter, J. N. Carter and W. J. Carter.

Birmingham, Ala. — Paving.—Southern Bitulithic Co. has contract for street paving amounting to \$94,447.50 on First, Third, Fourth and Sixth avenues.

Birmingham, Ala. — Mining.—Southern Mining & Development Co. incorporated with \$10,000 capital stock by M. H. Sewell, W. H. Thorp, J. Rosenbaum and R. Ezell.

Birmingham, Ala. — Suburban Development. Birmingham Suburban Development Co. incorporated with \$10,000 capital stock. W. J. Adams is president, J. S. Moore vice-president and A. R. Mood secretary-treasurer.

Brewton, Ala. — Turpentine Distillery.—J. L. and C. W. Edwards, Kirkland, Ala., have leased for 12 years at \$50,000 about 11,000 acres of timber land. Turpentine distillery will be erected and work of boxing the timber will begin next autumn.

Camden, Ala. — Hardware.—Matthews Hardware Co. incorporated with \$10,000 capital

stock by L. F. Metcalf, L. S. McConnell, B. H. Matthews and others.

Birmingham, Ala. — Mineral Development.—Southern Mineral Development Co. incorporated with \$10,000 capital stock. N. H. Sewell is president, R. R. Zell vice-president and engineer, W. H. Tharpe secretary and J. Rosenbaum treasurer.

Decatur, Ala. — Ice Plant.—Decatur Ice & Coal Co., recently reported as doubling capacity of plant, will erect brick addition; cost of buildings and equipment probably \$20,000; capacity, 50 tons ice; engineer, Basil S. T. Dobree; secretary and manager, T. W. Jenkins.*

Ensley, Ala. — Sewerage.—City has voted affirmatively the issuance of \$55,000 of bonds for sanitary and storm sewerage; referred to April 11. Address The Mayor.

Florence, Ala. — Horse-collar Factory.—Langenbrunner & Co., Cincinnati, Ohio, advise that consideration has not been given to establishment of horse-collar factory. (Reported May 16.)

Gadsden, Ala. — Paving.—Julian Kendrick, Birmingham, Ala., will soon submit report on street-paving materials to be used in the improvement of Broad street, for which \$20,000 is available. (Referred to February 7.) Address Mayor Dunlap.

Gadsden, Ala. — Stove Foundry.—A. & J. Manufacturing Co. has increased capital stock from \$25,000 to \$50,000 and will make extensive improvements to plant.

Jasper, Ala. — Sewerage.—City has voted affirmatively the issuance of \$15,000 of bonds to construct sewerage system. Address The Mayor.

Montgomery, Ala. — Brick and Tile Works.—Montgomery Brick & Tile Co. incorporated with \$100,000 capital stock. H. B. Battle is president, I. S. Stanton vice-president, J. W. Kelly second vice-president and E. W. Stay secretary-treasurer.

Montgomery, Ala. — Railway Shops.—Atlanta & West Point Railroad and Western Railway of Alabama is progressing steadily with the construction of proposed shops in North Montgomery, to cost about \$100,000. All the machinery will be operated by electricity, and it is understood that contract for furnishing electric power has been practically awarded; C. A. Wickersham, Atlanta, Ga., president and general manager.

Montgomery, Ala. — Woodworking Plant.—Southern Sash & Door Co. incorporated with \$60,000 capital stock to succeed the Payne & Wood Building Material Co.; T. J. Wood, president; I. O. Anderson, vice-president and general manager, and E. B. Joseph, secretary-treasurer.

North Birmingham, Ala. — Lumber Plant.—McLean Lumber Co. (main office, Buffalo, N. Y.) has purchased hardwood mill and timber lands of the Case-Fowler Lumber Co.

Notasulga, Ala. — Cotton-oil Mill.—Notasulga Cotton-Oil Co. has been organized with Mr. Burns, Opelika, Ala., president. Ginnery and oil mill will be built; plans for same not yet prepared; E. H. Reynolds, chairman building committee.

Roanoke, Ala. — Guano Plant.—Roanoke Guano Co. incorporated with \$12,000 capital stock by W. H. Knight, J. C. Wright, W. W. Campbell and others.

Rushton, Ala. — Lumber.—Parsons Lumber Co. incorporated with \$50,000 capital stock by Leo M. Parsons, Albert L. Parsons, Jr., and J. Mayes Parsons.

Selma, Ala. — Sawmill.—P. S. Gilder will install sawmill with daily capacity of 50,000 feet. The machinery has been purchased from the Southern Engine and Boiler Works of Jackson, Tenn.*

ARKANSAS.

Black Rock, Ark. — Veneering Mill.—Wm. LeMay will install veneering mill.

Camden, Ark. — Sewerage.—E. A. Kingsley, Little Rock, is preparing plans for constructing sewers; estimated cost \$3000.

Camden, Ark. — Fertilizer Plant.—Camden Oil Mills will erect building 40x120 feet and equip with machinery for mixing fertilizers, capacity to be 60x30 tons. Machinery has not been purchased.*

Charleston, Ark. — Lumber.—Minden Lumber Co. incorporated with \$20,000 capital stock to succeed Minden Bros.; Theo. Minden, president; Nick F. Minden, vice-president, and Forrest Ward, secretary-treasurer.

Culp, Ark. — Sawmill.—J. B. Harvey will install sawmill.

Dermott, Ark. — Manufacturing.—Birnle-Ashcroft Manufacturing Co. incorporated with \$15,000 capital stock; Joseph Ashcroft, president; June P. Wooten, secretary, and Baldy Vinson, treasurer.

Earl, Ark. — Telephone and Telegraph System.—Earl & Tyrone Telephone & Telegraph Co. has increased capital stock from \$5000 to \$10,000.

Eureka Springs, Ark. — Land Improvement. Leatherwood Land & Improvement Co. incorporated with \$25,000 capital stock by John D. Jordan, M. D. Jordan, W. B. Brown and C. C. McCarty.

Fort Smith, Ark. — Building Materials.—Ezra J. Morgan Company incorporated with \$16,000 capital stock by Ezra J. Morgan, Della E. Morgan and J. E. Morgan.

Hardy, Ark. — Sawmill.—Morgan Company will erect sawmill, etc., at cost of \$5000 for building and equipment; main building to be 36x100 feet; production: car and track material, large and small dimensions; ties, piling and posts; engineer and architect, John L. Reid, Portland, Ark.; general manager, W. S. Morgan.

Hot Springs, Ark. — Hardware.—Tucker Hardware Co. incorporated with \$25,000 capital stock by S. W. Tucker, H. W. Watson and E. E. Huddleston.

Jonesboro, Ark. — Shingle Mill.—Michark Manufacturing Co. will establish shingle mill. Building 42x84 feet will be erected. Officers are M. C. Townley, George C. Peters and E. L. Pierce.

Lake Village, Ark. — Paving.—Board of Improvement will receive bids until June 10 for building concrete sidewalk five feet wide and three-quarters of a mile long; E. P. Toney, Mayor.*

Little Rock, Ark. — Oil Mills.—Dixie Oil Co. incorporated with \$100,000 capital stock to manufacture and refine oil; J. A. Austin, president; J. B. Hildebrand, vice-president; Morris Deutch, secretary, and J. B. Hildebrand, treasurer.

Little Rock, Ark. — Safes.—Lillard-Hankins Company incorporated with \$25,000 capital stock to manufacture fire and burglar proof safes, adding machines, bank and office fixtures, etc.; M. M. Hankins, president; W. B. Lillard, vice-president, and Claude C. Thompson, secretary-treasurer.

Little Rock, Ark. — Creosoting Plant.—Ayer & Lord Tie Co., J. B. Lord, president, Chicago, Ill., is proceeding with the construction of proposed creosoting plant. About 800 feet of trackage connecting with the Rock Island Railroad have already been laid on the site, which comprises 160 acres, land is being graded and other improvements made preparatory to erection of buildings. It is proposed to install four-cylinder plant with capacity for treating about 2,000,000 ties annually, investing about \$150,000. Output of plant will be taken by the Rock Island Company. (Referred to February 7.)

Little Rock, Ark. — Gas Plant.—Little Rock & Fort Smith Gas & Oil Co. has elected E. S. Gregg president, Frank Brown vice-president, E. E. Morris secretary and J. E. England, Jr., treasurer; main office in Little Rock. (Referred to May 16 under Fort Smith, Ark.)

Magnolia, Ark. — Land Improvement.—Columbia County Land Improvement & Mercantile Co. incorporated with \$50,000 capital stock; R. G. McDaniel, president; David Dancy, vice-president; H. Hayes, secretary, and H. Jackson, treasurer.

Mammoth Spring, Ark. — Axe-handle Factory.—Hartwell Bros., Chicago, Ill., are reported as having organized company to establish factory with daily capacity of 150 dozen axe handles.

Marked Tree, Ark. — Canal.—County Court has awarded contract for construction of canal from Marked Tree to St. Francis river; length of canal 15 miles; cost \$40,000; contractors, Canal Construction Co., Chicago, Ill.

Monticello, Ark. — Coal and Oil.—Southeast Arkansas Development Co., recently reported incorporated, will install machinery to drill for oil and coal. Officers are: C. T. Harris, president; E. B. Wells, vice-president; R. W. Wilson, secretary; R. L. Hyatt, treasurer.*

Newport, Ark. — Stave Plant.—Newport Stave Co., recently reported incorporated, will operate plant for the production of tight-barrel staves; capacity, 10,000 per day; James E. Murphy, Peoria, Ill., president.

White, Ark. — Lumber Plant.—Guilege Bros. Lumber Co. is installing band saw and slab conveyors, besides making other improve-

ments to plant, increasing capacity to 100,000 feet per day. It has recently purchased additional timber and mills at Casey, La., and Rawls, Ark.

DISTRICT OF COLUMBIA.

Washington, D. C. — Ice Plant.—Takoma Springs Ice Co. has been incorporated with capital stock of \$400,000 to manufacture ice by James A. Sample, Bond Building, 14th street and New York avenue N. W.; Curtis M. Smith, Wisconsin avenue N. W.; George C. Tower, 428 4th street N. E., and Charles M. Heaton, Takoma Park, all of Washington, D. C., and G. V. Pattison, H. W. Pentecost and L. E. Pentecost, all of Guthrie, O. T.

FLORIDA.

Green Cove Springs, Fla. — Water-works.—A. A. Kind, Jacksonville, Fla., will establish water-works. (Referred to May 16.)

Jacksonville, Fla. — Road Construction.—Sealed bids will be received by Board of County Commissioners, C. Benedict, chairman, until June 5 at clerk's office for construction of county road from South Jacksonville to Atlantic Beach, approximately 12 miles. (Referred to April 11.)*

Jacksonville, Fla. — Grain Elevator.—United Grain & Elevator Co. will be incorporated to build elevators, deal in grain, etc.; B. G. Lasseter, president; C. H. Barnes, vice-president, and W. Frazier Jones, secretary-treasurer.

Jacksonville, Fla. — Grain Elevator.—United Grain & Elevator Co., recently reported incorporated, has purchased location 700x160 feet; plans for building not yet made; president, B. G. Lasseter.

Jacksonville, Fla. — Steam Laundry.—Rico Steam Laundry Co. will erect two-story brick building, 52x100 feet, to be equipped as steam laundry.

Pensacola, Fla. — Sawmills and Timber Lands.—W. K. Hyer, Jr., and W. A. Blount of Pensacola and J. R. McLane, Geneva, Ala., have purchased at about \$100,000 the properties of the Florida & Alabama Land Co., including 20 miles of railroad, two sawmills—one in Pensacola and one in Falco, Ala.—and 50,000 acres of timber land in Escambia county, Florida, and Covington county, Alabama. It is proposed to install new planing mill and drykiln and make other improvements. Mr. Hyer will be president and Mr. McLane general manager.

St. Petersburg, Fla. — Packing Plant.—Tampa Bay Packing Co., Cramer B. Potter, resident manager, will erect packing-house, 50x100 feet, for handling citrus fruits.

GEORGIA.

Abbeville, Ga. — Cotton Gin.—Farmers' Union has purchased building to be equipped as cotton gin.

Atlanta, Ga. — Box Factory.—Shearer Box Co. incorporated with \$5000 capital stock by W. C. Shearer, T. R. Shearer and Jack J. Spalding.

Augusta, Ga. — Composition Roofing.—E. C. Barnett, Harrisburg, Pa., is reported as organizing company to establish plant to manufacture composition roofing.

Augusta, Ga. — Water-works Improvement.—City contemplates increasing water supply by erection of additional reservoir and construction of another pipe line from basins to city. Address The Mayor.

Augusta, Ga. — Gas Plant.—Augusta Gas Co., M. D. Schindler, Esq., manager, will soon begin proposed extensive improvements to plant, involving an expenditure of \$100,000. First work to be undertaken will be the erection of gasholder with capacity of 500,000 cubic feet, costing about \$40,000. Other betterments to be made include the installation of battery of new purifiers with daily capacity of 1,000,000 cubic feet of gas and the construction of eight-inch main from plant to Broadway.

Brunswick, Ga. — Marble Works.—S. B. Giddens, Jacksonville, Fla., and associates will establish marble works.

Brunswick, Ga. — Electric Light Plant.—Reported that contract has been awarded by the Fore River Shipbuilding Co. of Quincy, Mass., general contractor for the Atlanta, Birmingham & Atlantic Railroad, to the Florida Electric Co., Jacksonville, Fla., for erection of electric plant to be used for lighting the terminals, warehouses, piers, etc. It is understood the plant will have a capacity of 150 kilowatts and cost \$25,000, with specifications for 177 arc lights and 1000 incandescent lights.

Chatsworth, Ga.—Brick Plant.—Chatsworth Brick Co. has been organized by J. M. Sanders, Dalton, Ga., and others. It has established brick works, equipped with 60-horse-power boiler and having capacity of 30,000 bricks per day.

Colbert, Ga.—Cottonseed-oil Mill and Guano Factory.—James M. Smith has organized stock company to build cottonseed-oil mill and guano factory.

Elberton, Ga.—Street Improvements.—City will soon advertise for bids on proposed street improvements—10,000 to 15,000 square yards of vitrified-brick paving. H. S. Jaudon of Thomasville, Ga., is the engineer in charge.*

Elberton, Ga.—Water-power Electric Plant. Dr. A. S. Oliver, I. G. Swift and T. H. Verdel are reported as having purchased an interest in the Thompson factory and about 12 or 15 acres of land adjoining Anthony shoals. It is understood that a dam will be constructed across Broad river for developing water-power.

Hartwell, Ga.—Ice Plant, Steam Laundry, etc.—J. L. Linder and William T. Johnson will establish ice plant and steam laundry. It is understood that bottling works will also be conducted.

Macon, Ga.—Bottling Works.—Americus Coca-Cola Bottling Co. incorporated with \$3000 capital stock and privilege of increasing to \$10,000 by Herbert F. Haley, Malcolm D. Jones and others.

Madison, Ga.—Water-works, Sewerage and Electric-light Plant.—Bids for constructing water-works and sewerage system and improvements to electric-light plant will be received until June 6; Col. E. W. Butler, Mayor.*

Sandersville, Ga.—Sewers.—Contract has been awarded to Chas. E. Perry, Canajoharie, N. Y., for construction of six miles of sewers, with 60 manholes and 10 automatic flush tanks; amount of bid, \$17,782.40; engineer, Arthur Pew, Atlanta, Ga. (Bids mentioned recently.)

Savannah, Ga.—Fertilizer Plant.—Willcox, Ives & Co. have awarded contract to Peter Raby for erection of several buildings, costing about \$40,000, to be equipped as fertilizer plant; manufacturing shed will be of frame construction, 330x150 feet, and contain offices and storerooms. Another frame building will be used for storing nitre. Railroad tracks will be constructed for shipping and receiving purposes. Plans have been prepared by Henry Urban.

Savannah, Ga.—Lumber Plant.—Georgia-Carolina Lumber Co. is proceeding with erection of its proposed plant. Its sawmill will be 48x232 feet in size, planing mill 48x100 feet, dry-kilns 50x100 feet; mill to be a band, with gang and resaw, producing lumber and dimension material; daily output, 75,000 to 100,000 feet. Nearly all equipment has been contracted for, including cars and locomotives for lumber railway. About \$100,000 will be the cost of the plant. Company has capital stock of \$300,000, and its officers are: E. L. Bullock, president; William L. Sheaffer, treasurer, and J. W. Beecher, general manager, all of Pottsville, Pa., where the company's principal offices are located; mill located at Central Junction, four miles from Savannah; timber to be cut lies between that town and Ogeechee river. M. H. Ziegler is mill superintendent and W. S. Boynton engineer in charge of construction. Their address is R. F. D. No. 42, Louisville Road, Savannah, Ga. (This proposition recently mentioned.)

Savannah, Ga.—Lithographing, etc.—Commercial Lithographing & Printing Co. incorporated with \$25,000 capital stock by O. S. Kulman and Herman Valsburg.

Savannah, Ga.—Oil Refinery.—Atlantic Turpentine Co. incorporated with \$65,000 capital stock by B. H. Baker and R. M. Hitch to manufacture and refine oil.

Summerville, Ga.—Cotton-oil Mill and Ginnery.—Summerfield Cottonseed Oil Mill (recently reported as being organized) contemplates establishing cottonseed-oil-mill plant and ginnery combined. B. H. Edmondson is temporary president and manager.

Valdosta, Ga.—Sash and Door Factory.—Valdosta Sash & Door Co. will rebuild plant recently burned at a loss of \$75,000.

KENTUCKY.

Barren County, Ky.—Timber Development. Love, Boyd & Co., Nashville, Tenn., have purchased for development about 300 acres timber land, mostly white oak; price, \$8500. (Recently incorrectly noted under Smith County, Ky.)

Center, Ky.—Flour Mill.—W. S. Greer is interested in the installation of flour mill.

Coffman, Ky.—Coal Mines.—Coffman Coal Co. incorporated with \$25,000 capital stock

by A. J. Bonafeld, Tunnelton, W. Va.; A. W. Burdett and John W. Miller, Grafton, W. Va., and others.

Frankfort, Ky.—Glass Works.—Frankfort Modes Glass Works has increased capital stock from \$50,000 to \$100,000.

Gracey, Ky.—Lead Mines.—Gracey Mining Co. will develop recently-discovered lead veins on its property.

Henderson, Ky.—Mining.—People's Mining Co. incorporated with \$22,000 capital stock by J. E. Hosbach, J. W. Todd and W. S. Forwood.

Hickman, Ky.—Brick Plant.—W. A. Dodds will install steam-power pressed-brick factory.

Louisville, Ky.—Manufacturing.—E. A. Stege Manufacturing Co. incorporated with \$15,000 capital stock by George Stege, Louis Stege, C. Stege, Edward Gramemeyer and others.

Louisville, Ky.—Manufacturing.—Louisville Manufacturing Co. incorporated by Charles Fitzgerald, Owen D. Duffin and J. H. Lindenberger.

Louisville, Ky.—Varnish Plant.—Louisville Varnish Co. has purchased site 30x160 feet on which to erect new plant.

Morganfield, Ky.—Sand, Gravel and Rock Development.—Gravel Switch Land Co. has been incorporated with Collins Waller president and W. J. Waller secretary. Corporation controls timber land and will develop sand, gravel and rock.*

Newport, Ky.—Brick, Coal and Supplies.—Newport Brick, Coal & Supply Co. incorporated by August Helmbold, Emilie Schmidt and Fred Schmidt.

Owensboro, Ky.—Planing Mill.—Home Building Planing Mill Co. incorporated with \$25,000 capital stock by A. J. Williams, J. H. Parrish and S. C. Stinson.

LOUISIANA.

Alexandria, La.—Sawmill.—Dry-Prong Lumber Co. has been organized with \$6000 capital stock. I. J. Rhinehardt is president, William Frazer vice-president and Miss Bertie Lacroix secretary-treasurer.

Bogalusa, La.—Lumber Creosoting Plant.—Great Southern Lumber Co. states it has not yet definitely decided to build the lumber creosoting plant referred to recently. It is investigating to ascertain if the demand will justify the installation of a creosoting plant in connection with the company's lumber mill, now under construction, to have an output of 600,000 feet in 20 hours. C. W. Goodyear is vice-president, with offices at 950 Ellicott Square, Buffalo, N. Y.

Bogalusa, La.—Viaduct.—Police jury will build steel viaduct to cost \$7000, connecting North and South Bogalusa by Columbia road; viaduct will have a 600-foot approach on either side, span over creek of 125 feet and 24-foot roadway with a six-foot walk on the side.

Bogalusa, La.—Brick Works.—Great Southern Lumber Co., C. W. Goodyear, Buffalo, N. Y., vice-president, is reported to build brick works having a daily capacity of 100,000 bricks.

Crowley, La.—Rice Milling and Irrigation. Consolidated Rice Milling Co. has taken over the five rice mills of the Louisiana Irrigation & Mill Co., consisting of Star A and Star B at Crowley; White Swan, Morse, La.; Louisiana, Jennings, La., and the Roanoke, Roanoke, La. The five canals have been retained by the latter company. A bond sale of \$600,000 has been authorized. Officers of both companies are: President, P. L. Lawrence; vice-presidents, Miron Abbott and P. S. Lovell; secretary, Alex Brown; assistant secretary, E. C. McMurry.

Eunice, La.—Water-works.—Sealed bids will be received until July 15 for construction of water-works. O. E. Vidrine, Mayor.*

Gilbert, La.—Hardwood Factory.—A. D. Puckett, representing the Pioneer Pole & Shaft Co., Memphis, Tenn., is purchasing hickory timber near Gilbert and it is understood that his company expects to build hardwood factory.

Glencoe, La.—Sugar Mill.—A. A. Bonvillain is reported as about to make extensive improvements to rice mill.

Grosse Tete, La.—Moss Mill.—George B. Kimbro and George B. Kimbro, Jr., of Ascension Parish, reported as to erect moss gin.

Hammond, La.—Lumber Mills.—Tarrego Lumber Co. has been organized with \$10,000 capital stock to manufacture lumber and operate planing mills. It is now erecting planing mill near Illinois Central Railroad, where sidings and spur tracks are being installed.

Lake Charles, La.—Turpentine Distillery.—Southland Turpentine Co., reported incorpo-

rated March 21 with \$60,000 capital stock, has leased site, had plans for buildings prepared and is now receiving bids for erection of same, to be equipped for extracting turpentine and other products from pine stumps and mill waste by steam distillation. About \$15,000 will be invested. Structures will be so arranged that the capacity of plant can be doubled whenever desirable. Dr. Philip Asher, New Orleans, La., president; Charles R. Phillips, treasurer and manager, and will be in charge of the Lake Charles plant; main offices, New Orleans, La.

Natchitoches, La.—Lumber.—Caldwell-Norton Lumber Co. incorporated with \$150,000 capital stock. It has recently purchased the Petty Lumber Co.

New Iberia, La.—Bridge.—The city government has authorized the construction of a wooden bridge across Bayou Teche at the east end of the city; said bridge is to be constructed by the parish and city jointly and is to cost not over \$5000. Address The Mayor.

New Orleans, La.—Lumber Plant.—Mehlig Lumber Co., Ltd., recently reported incorporated, will erect and equip buildings; size 150x40 feet; cost \$10,000; capacity 25,000 feet cypress and hardwood timber per day; manager, J. B. Humphreys; address, 113 St. Charles street.

New Orleans, La.—Land and Lumber Company.—Louisiana Land & Lumber Co. incorporated with \$100,000 capital stock by Morgan Jones (president), William A. Hill (secretary-treasurer), Lincoln J. Cotton and others.

Oberlin, La.—Timber.—Oberlin Lumber Co. has been organized with \$50,000 capital stock; G. W. Galennie, president; N. C. Waggoner, vice-president and general manager, and K. M. Galennie, secretary-treasurer.

Opelousas, La.—Lumber Plant.—Nigh-Rutledge Lumber & Manufacturing Co., Ltd., recently reported incorporated, will erect band mill at cost of \$25,000 for building and equipment; product, hardwood lumber; P. A. Rutledge, president; P. N. Anger, engineer.

Rochelle, La.—Steam Laundry.—Reported that William Sinclair, Kansas City, Mo., will build steam laundry.

MARYLAND.

Baltimore, Md.—Concrete Bridge.—Wyatt & Nolting, architects, Keyser Building, have submitted plans to the Park Board for the construction of concrete bridge over Stony run and the tracks of the Maryland & Pennsylvania Railroad, to connect the driveway at Wyman's Park with the Cedar avenue driveway leading to Druid Hill Park.

Baltimore, Md.—Oyster-packing Plant.—J. Langrall & Bro., Inc., oyster packers, 2105 Aliceanna street, have been incorporated with capital stock of \$100,000 to conduct oyster-packing plant by Leander Langrall, Frank W. Miles, Frank A. Curry, Roland Parker and Leroy M. Langrall.

Baltimore, Md.—Printing Plant.—Lord Baltimore Press, Inc., has been incorporated with capital stock of \$300,000 to operate printing plant by Simon Dalsheimer, 1702 Linden avenue; Nathan Billstein, Liberty road and 11th street, and Roger W. Cull.

Baltimore, Md.—Specialty Plant.—International Specialty & Manufacturing Co. has been incorporated with capital stock of \$100,000 to manufacture specialties by Wm. J. Voigt, 400 North Fremont avenue; August C. May and B. T. Bevan.

Baltimore, Md.—Electric Specialties.—Electric Manufacturing Co. has been incorporated with a capital stock of \$2000 to manufacture and deal in electric specialties. Incorporators: Joseph M. Zamolski, 469 West Lexington street; Sydney C. Blumenthal, John H. Tschudi and associates.

Elkton, Md.—Road Construction.—Sealed proposals addressed to County Commissioners of Cecil county will be received until June 3 for improving public highway between Elkton and Chesapeake City and between Elkton and Slingerly; C. A. Benjamin, president.*

Hagerstown, Md.—Cooperage and Storage Building.—D. S. Snively will erect storage building, portion of which will be equipped for manufacturing barrels; 106x50 feet; four stories; brick.

Owings Mills, Md.—Bridge.—Western Maryland Railroad has awarded contract to the Pennsylvania Steel Co., Philadelphia, Pa., for erection of bridge across the Reisterstown turnpike at Owings Mills.

Salisbury, Md.—Fertilizer Factory.—William B. Tighman Company will erect building 60x30 feet, two stories high, to be equipped as fertilizer factory.

Thurmont, Md.—Land Improvement.—Thurmont Land & Improvement Co. incorporated with \$20,000 capital stock to improve tract of

land recently purchased by John R. Rouzer, Dr. M. A. Birely, L. R. Waesche, Thomas E. Lycett and others.

Towson, Md.—Water Plant.—T. Scott Offutt and associates are organizing company to furnish Mount Washington, Towson, Lutherville, Ruxton, Sherwood and other towns with water. An option has been secured on 25 acres of land near Lystra, and it is estimated that a supply of 500,000 gallons of water per day can be obtained from wells and springs. About 15 miles of mains will be laid at an approximate cost of 75 cents per linear foot. Two large standpipes will be erected and the water will flow by gravity to towns named.

Towson, Md.—Road Improvements.—Bids will be received by Highways Commission of Baltimore County until June 13 for improving public highway between Reisterstown pike and Park Heights avenue; E. Stanton Bosley, secretary of board.*

Upper Marlboro, Md.—Road Construction.—Bids addressed to County Commissioners of Prince George county will be received until May 28 for improving public highway between Washington and Marlboro; Henry St. J. L. Briscoe, clerk.*

Westminster, Md.—Road Improvement.—Bids will be received by County Commissioners of Carroll County for improving public highway from Mount Pleasant northwesterly, known as the Nicodemus road, until June 3. D. H. Hesson, George E. Benson and George W. Brown constitute board.*

MISSISSIPPI.

Biloxi, Miss.—Hat Factory.—J. A. Broadus is interested in a proposition to establish hat factory.*

Biloxi, Miss.—Steam Laundry.—A proposition to establish steam laundry is in charge of J. A. Broadus.*

Gulfport, Miss.—Gas Plant.—Gulf Coast Gas Co. will enlarge plant and probably extend mains to Long Beach and Pass Christian, Miss. Additional machinery will be installed.

Natchez, Miss.—Street Paving.—J. N. Hazlehurst, consulting engineer, Atlanta, Ga., has presented tabulated report on bids for street paving, and estimates total cost at \$77,135 for bitulithic and \$73,299 for asphalt. Special committee has been authorized to award contract. (Referred to April 25 and previously.)

New Augusta, Miss.—Timber Development. Reported that the Knapp-Stout Lumber Co. of Pennsylvania has purchased for development 35,000 acres of timber land in Perry county; purchase price about \$2,000,000.

Ocean Springs, Miss.—Box Factory.—K. Champlain has secured site and will establish box factory.

Osyka, Miss.—Cotton Compress.—Osyka Compress Co. has been organized with \$30,000 capital stock by E. F. Webb, S. A. Bacott, C. P. Neff and others.

Pascagoula, Miss.—Street Improvements and Sewerage System.—Mayor and Board of Aldermen have authorized the issuance of \$20,000 of bonds for street improvements and sewerage system. J. D. Ferguson, Biloxi, Miss., has been appointed to draft plans and make map preparatory to supervising necessary work after bids have been accepted.

MISSOURI.

Cartersville, Mo.—Street Improvements.—The city will soon contract for cement sidewalk improvements to cost \$18,000. Address H. E. Moody, City Clerk.*

Carthage, Mo.—Mining.—King Pin Mining Co. incorporated with \$100,000 capital stock by Harry M. Cornell, Charles O. Harrington, R. E. Blankenship and others.

Concordia, Mo.—Mill and Elevator.—Concordia Mill & Elevator Co. incorporated with \$40,000 capital stock by T. H. Kueck, H. C. Kueck, H. C. Kroencke and others.

Harrisonville, Mo.—Scale and Foundry Plant.—Improved Scale & Foundry Co. will erect, at cost of \$15,000, buildings recently mentioned; architects, Jones & Edwards; manager, L. M. Vreeland. Company is engaged in general foundry work and the manufacture of scales.

Joplin, Mo.—Mining.—Crocus Hill Mining Co. incorporated with \$100,000 capital stock by A. E. Bendelari, Fred S. Cook, B. L. Geddes and others.

Joplin, Mo.—Mining.—Lgon Mining Co. incorporated with \$50,000 capital stock by C. W. Adams, W. J. Robinson, Ella Williams and others.

Kansas City, Mo.—Machine Construction.—National Machine & Construction Co. incorporated with \$6000 capital stock by Elmer E. Billow, Frank Schmidt, L. Holzbauer and others.

Kansas City, Mo.—Iron Works.—Witte Iron Works Co. will increase capital stock to \$75,000. It has purchased site on which to erect one-story brick, stone and iron building 241x243 feet, to be equipped with lathes, radial drills, presses, milling machines, etc., having an annual capacity of 3000 gas engines; cost of structure \$60,000 and of equipment \$100,000; Ed H. Witte, president; Sheppard & Farrar, architects. (Referred to May 2.)

Kansas City, Mo.—Building Company.—Standard Building Co. incorporated with \$30,000 capital stock by Henry B. Lappe, Andrew J. Shirk and Winthrop Allen.

Kansas City, Mo.—Creosoting Plant.—American Creosoting Co., H. C. Starr, president, Richmond, Ind., will build plant for creosoting ties for the Rock Island-Frisco system of railways.

Kansas City, Mo.—Gas and Traction Company.—Union Gas & Traction Co. incorporated with \$5000 capital stock by C. H. Pattison, S. J. Mattocks and Charles T. Luthy.

Kirksville, Mo.—Shoe Factory.—Friedman-Shelby Shoe Co., St. Louis, Mo., will establish shoe factory. Two buildings will be erected, of stone and brick, 60x300 feet; two stories each; cost of buildings and equipment, \$100,000; product, 5000 pairs shoes daily; architect, M. J. Firey; officers, A. Friedman, president, and W. H. Shelby, vice-president.

Neosho, Mo.—Mining.—Morse-Martin Mining Co. incorporated with \$25,000 capital stock by Lee G. Martin, D. L. Morse, Olive L. Morse and others.

Sikeston, Mo.—Lumber.—Fischer Lumber Co. incorporated by F. H. Davis, W. E. Gould and John Fischer, all of Kewanee, Ill. It will build a sawmill at Sikeston, and the St. Louis & San Francisco Railroad is now constructing a switch to the site.

St. Joseph, Mo.—Printing Plant.—American Printing Co., recently reported as increasing capital stock, will erect brick or concrete building 40x130 feet; three stories; cost about \$25,000; architects, Trunk & Helm; W. G. Campbell, Jr., general manager.

St. Louis, Mo.—Construction, etc.—Lincoln Concession & Construction Co. incorporated with \$10,000 capital stock by F. C. Hawken, L. J. Wenkler and George W. Danks.

St. Louis, Mo.—Publishing.—Hawkins Publishing Co. incorporated with \$10,000 capital stock by David C. Baker, John O. Wilson and B. M. Baker.

St. Louis, Mo.—Stone Casting.—A. G. Brauer Supply Co. incorporated with \$75,000 capital stock by A. G. Brauer, John F. Schuricht and Julius Hartig.

St. Louis, Mo.—Electric Appliances.—Grado Electric Co. incorporated with \$100,000 capital stock by William F. Grado, Chas. A. Niel, Joseph Zerr, E. A. Wiedemann and others.

St. Louis, Mo.—Carpenter Shop.—Wm. J. Lemp Brewing Co. is having plans prepared by G. T. Norton for erection of carpenter shop 160x66 feet; cost \$30,000.

St. Louis, Mo.—Bakery.—McKinney Bread Co., J. E. McKinney, president, has purchased site 160x294 feet at \$29,400, on which to construct bakery, plans for which are being prepared. It is proposed to erect three-story fireproof brick structure, interior finished throughout with white enamel, to be equipped for manufacturing, with smaller building in rear to contain ovens, etc.; remaining portion of lot will be occupied by stables. Railroad switch will be run into basement, and flour and other material will be unloaded direct from cars. Plant will be used as West End distributing station.

St. Louis, Mo.—Engineering.—Tait-Nordmeyer Engineering Co. incorporated with \$5000 capital stock by Roderick H. Tait, Louis C. Nordmeyer, Cora B. Tait and Clara Nordmeyer.

St. Louis, Mo.—Monument Works.—Missouri Red Granite Monument Co. incorporated with \$5000 capital stock by George B. Jameson, Robert P. Schneider, John H. Brod, Jr., and others.

St. Louis, Mo.—Can Factory.—Columbia Can Co. incorporated with \$60,000 capital stock by Fred L. Westerbeck, Herman F. Westerbeck, Charles Doerman and others.

St. Louis, Mo.—Clock Works.—Talking Clock Manufacturing Co. incorporated with \$400,000 capital stock to manufacture a patented device known as the "talking clock," etc., by Charles C. Bishop, Wm. L. Ryan, H. W. Bishop, Charles R. Rife and others.

St. Louis, Mo.—Drug and Chemical Company.—Borchers Drug & Chemical Co. incorporated with \$10,000 capital stock by Eugene Hale, William Stohmann and Charles R. Borchers.

St. Louis, Mo.—Publishing.—Auto Review Publishing Co. incorporated with \$6000 capital

stock by Nelson T. Gutellus, James A. Abeles and Arthur C. Williamson.

St. Louis, Mo.—Building Construction.—Elmo Building & Construction Co. incorporated by G. M. von Schrader, F. R. Bissell and F. E. Hannemann.

Trenton, Mo.—Electric-light Plant.—Citizens Gas & Electric Co. has duplicated plant and reconstructed and extended gas service; cost of equipment, \$20,000; capacity, 300 kilowatts; architects, Beadle & Maxwell, 42 Beaver street, New York; engineer and manager, H. H. Cloyd; secretary, W. W. Levering, 1323 Chestnut street, Philadelphia, Pa. (Mentioned recently.)

Webb City, Mo.—Concentrating Plant.—Bulldog Mining Co., recently reported incorporated, will establish 250-ton concentrating plant at cost of \$25,000; managers, Chapman & Dunan.

Webb City, Mo.—Zinc Mining.—Glass Zinc Mining Co. incorporated with \$100,000 capital stock by F. A. Glass, Charles L. Glass and George H. Glass.

Webb City, Mo.—Mining.—Birdog Mining Co. incorporated with \$250,000 capital stock by Geo. W. Ball, William S. Gunning and W. C. Ball.

NORTH CAROLINA.

Asheville, N. C.—Dam Construction.—City is considering the construction of dam across the left prong of the North Fork and finishing of canal across to right prong, thus diverting its waters for use in case of emergency. About 2,000,000 gallons of water additional will be provided. B. M. Lee, City Engineer, has been requested to ascertain the cost.

Asheville, N. C.—Harness Plant.—Asheville Harness Co. incorporated with \$20,000 capital stock by E. M. Alexander, J. P. Coston, Charles Glass and C. N. Webster.

Bethune, N. C.—Concrete-block Plant.—C. S. Nicholson contemplates establishing a concrete-block plant. No machinery has been purchased.

Brevard, N. C.—Lake.—George W. Vanderbilt is reported as having decided to lease the water-power of Davidson river on the Biltmore estate, in connection with which it is proposed to build large dam, creating lake about four miles long and three-quarters of a mile broad, along the shores of which a number of cottages will be built. W. E. Breese, Jr., it is stated, will act as agent.

Burgaw, N. C.—Lumber.—Red Lion Lumber Co. incorporated with \$100,000 capital stock by Wm. F. Baughman, D. Sterling Mitzel, John S. Streagelg and others. (Recently erroneously reported under Maryland.)

Charlotte, N. C.—Electric Company.—Bradshaw Electric Co. incorporated with \$50,000 capital stock by C. E. Bradshaw, Oliver Helms and T. H. Bradley.

Charlotte, N. C.—Granite Monuments.—Jesse E. Dresser will organize the Dresser Electric Granite Works to establish plant, equipped with electric and compressed-air machinery, to manufacture granite monuments.

Charlotte, N. C.—Optical Supplies.—Ed Puett & Co. have leased and will remodel storeroom at 39 North Tryon street and install equipment for manufacturing optical supplies. Ed Puett will be manager.

Charlotte, N. C.—Cotton Mill.—The Elizabeth Mills has definitely decided to enlarge plant as recently mentioned. It will erect additional building 75x182 feet in size and equip with 6000 spindles and accompanying machinery, thus about doubling present plant. All machinery purchased except possibly two 75-horse-power motors for driving same.

Cherryville, N. C.—Bottling Works.—David Rudisill of Cherryville and Junius R. Beam, Gastonia, N. C., will establish bottling works. Crown Bottling Works of Gastonia is in charge of construction work.

Durham, N. C.—Hardwood Novelties.—Hardwood Novelty Co. incorporated with \$100,000 capital stock by W. A. Erwin, R. J. Teague, A. Crennacker and others.

Durham, N. C.—Washing Fluid.—Whitted Washing Fluid Co. incorporated with \$5000 capital stock by L. A. Whitted, C. A. Whitted, A. D. Jones and others.

Franklin, N. C.—Lumber Flumes.—Carolina Flumes Co. incorporated with \$30,000 capital stock by R. C. Sweet, F. S. Johnson and G. L. Jones.

Franklin, N. C.—Clay and Mica Works.—Franklin Knolin & Mica Co. will erect and equip buildings at cost of about \$25,000; clay-working plant to have 40 tons daily capacity. Mica punchers will be installed for manufacturing electrical washers. Officers are: V. J. E. Fisher, president and general manager; Colonel Bingham, Asheville, N. C., vice-president; Wm. M. Jones, Asheville, N. C., secretary and treasurer.

Hickory, N. C.—Foundry.—Piedmont Foundry & Machine Co. has increased capital stock from \$10,000 to \$25,000; A. A. Shuford, Jr., president.

Hiddenite, N. C.—Emerald Mining.—The American Mining Syndicate is reported as developing emerald deposits on property recently purchased. Carey Wright is said to be in charge of mining operations.

High Shoals, N. C.—Cotton Mill.—The High Shoals Co. is reported as having decided to add 5000 spindles to its present equipment of 11,000 spindles and 470 looms.

Kings Mountain, N. C.—Cotton Mill.—Cora Cotton Mills contemplates making additions to its present plant of 10,500 spindles.

McFarlan, N. C.—Water-power Electric Plant.—It is reported that J. M. Taylor, New York, N. Y., will organize company to construct dam across Pee Dee river and develop the power of the Buchanan waterfalls, which will be used to generate electricity. About 10,000 horse-power is said to be available.

Montreat, N. C.—Hydro-electric Plant.—Southern Hydraulic Construction Co., Kellogg Building, Washington, D. C., has received contract to prepare plans and specifications for a 75-kilowatt hydro-electric plant at Montreat. Plans are complete, contract for materials has been awarded and construction will begin at once, construction also having been awarded to the Southern Company. Plant will be owned and operated by Mountain Retreat Association.

Rockingham, N. C.—Water-works and Sewerage.—City will install water-works and sewerage, for which \$40,000 bonds have been voted. W. N. Everett is Mayor, T. C. Leak chairman finance committee and Wm. Entwistle chairman water-works committee. (Mentioned recently.)

Rocky Mount, N. C.—Electric-light and Water-works and Street Improvements.—The city, having voted the proposed issuance of \$135,000 in bonds for street improvements, enlargement of electric-light plant and extension of water-works, will proceed to complete the necessary arrangements. After the bonds are sold machinery and supplies will be needed, including engines or turbines, electric generators, water-tube boilers, filter plant and sedimentation tank. A. S. Lyon is superintendent public works.

Rose Hill, N. C.—Vehicle Works.—Atlantic Wagon & Vehicle Co. has been incorporated; officers are Maury Ward, president; E. McN. Cott, vice-president, and L. C. Herring, secretary-treasurer and manager; buildings to be erected and equipped at cost of \$10,000 include factory 60x200 feet, painting and storage-room 60x200 feet and six or eight tenement-houses; company will manufacture wagons, carts and buggies; capacity, seven vehicles per day.

Salisbury, N. C.—Light, Heat and Power Plant.—Uriah W. Dickerson, William J. Downing, Marion V. Brewington, Charles R. Disharoon and others have purchased the Salisbury Light, Heat & Power Co.

Salisbury, N. C.—Lock and Safe Works.—Toledo Lock & Safe Works, Toledo, Ohio, is reported as considering the erection of plant in Salisbury.

Shelby, N. C.—Iron Works.—Shelby Machine & Supply Co. has elected John F. Schenck, Lawndale, N. C., president; Thomas B. Richards, Shelby, vice-president, and Wm. T. Carlton, Lattimore, N. C., secretary-treasurer. Preparations are being made to increase the capacity of plant, and the large warehouse and salesroom will be completed at an early date. (Company mentioned April 25 as having increased capital stock from \$10,000 to \$100,000.)

Smithfield, N. C.—Flour and Meal Mill.—Company is being organized with \$12,000 capital stock to build flour and meal mill; E. J. Holt to be president.

Waynesville, N. C.—Lumber.—Sprucemont Lumber Co. incorporated with \$30,000 capital stock by S. Montgomery Smith, J. W. Ferguson and George W. Beck.

Williamston, N. C.—Light and Power Plant.—Williamston Light & Power Co. will erect and equip plant at cost of \$7000. (Organization of company mentioned May 16.)

SOUTH CAROLINA.

Alken, S. C.—Printing Plant.—Journal Publishing Co. will install linotype machines in new concrete-block building to be erected; building to be 35x70 feet. (Recently mentioned.)

Columbia, S. C.—Phosphate Mining.—Tilghman Phosphate Co. incorporated with \$1,000,000 capital stock; Wm. B. Chisholm, president, and Henry A. M. Smith, secretary, both of Charleston, S. C.

Columbia, S. C.—Lavatory Fixtures.—Mr. Dozier, L. B. Dozier & Co., is reported to

organize company to establish plant for manufacturing lavatory fixtures.

Greenville, S. C.—Cotton Mill.—The Carolina Mills will add 5000 spindles, 150 looms and the necessary pickers, slubbers, etc., to present equipment of 6000 spindles and 176 looms. It will drive its plant by electricity from the development of the Greenville-Carolina Power Co., The new textile machinery has been contracted for. Lockwood, Greene & Co., 93 Federal street, Boston, Mass., and Greenville, S. C., are the engineers in charge of the enlargements.

Lancaster, S. C.—Cottonseed-oil Mill.—Lancaster Cotton Oil Co., previously reported as organized with \$80,000 capital stock, has elected John T. Stevens, president; L. C. Lazenby, vice-president, and M. B. Crigler, manager and treasurer.

Lancaster, S. C.—Cottonseed-oil Mill.—Lancaster Cotton Oil Co., previously reported as organized with \$80,000 capital stock, has elected John T. Stevens president, L. C. Lazenby vice-president, and M. B. Crigler, manager and treasurer. In addition to the cottonseed-oil mill, with a daily capacity of 60 tons, company will also operate a ginney to have a weekly capacity of 500 bales of cotton. Plans have been adopted and the erection of brick main building and warehouses will soon be begun.

Rock Hill, S. C.—Textile Mill.—Reported that A. F. Ruff, W. S. Adams and W. H. Harris will establish a textile mill.

Seneca, S. C.—Electric-light Plant.—City has voted affirmatively issuance of \$25,000 of bonds for equipping electric-light plant. Steam power-house will be used. Officers of Board of Public Works are L. A. Edwards, J. W. Bird and W. F. Austin.

Spartanburg, S. C.—Flour Mill.—R. K. Carson states that he is not interested in erection of flour mill, as was recently noted.

Spartanburg, S. C.—Water-works.—City Council has ordered an election to be held June 4 to determine whether city shall acquire by construction or purchase a water-works system, and to ratify the deal practically closed with the Home Water Supply Co. for purchase of local plant. (Referred to May 2.) Address The Mayor.

TENNESSEE.

Carthage, Tenn.—Electric-light Plant.—Carthage Electric Light Co. will install electric-light plant; president, T. J. Fisher.

Chattanooga, Tenn.—Water-works.—City will vote June 8 on the issuance of \$900,000 of bonds for proposed purchase or construction of municipal water-works. Address The Mayor.

Chattanooga, Tenn.—Cottonseed-oil Mill.—Wagoner Cotton Oil Co. incorporated with \$100,000 capital stock by G. N. Henson, W. B. Riddell, E. M. Ellsworth, J. H. Keller and Eugene T. Smith. It is now operating plant at Wagoner, I. T., having a daily capacity of 100 tons of oil.

Chattanooga, Tenn.—Sewerage.—Bids will be received by Board of Public Works, H. F. Van Dusen, chairman, until May 23 for constructing sewers; T. J. Gillespie, City Treasurer.

Chattanooga, Tenn.—Silix Mining.—Southern Silix Co. incorporated to mine silix, used in the manufacture of paints, by C. W. Bourne, J. T. Thomasson, Nap Loder, P. A. Brawner and F. Giddings.

Chattanooga, Tenn.—Tunnel Construction.—Sealed bids will be received until June 15 for construction of highway tunnel about 700 feet long under Mission Ridge, near Chattanooga; referred to April 11; A. J. Gabagan, chairman Tunnel Commission.

Clarksville, Tenn.—Sawmill.—J. V. Cooper & Co. are installing hardwood mill to have a daily capacity of 20,000 feet. Railroad ties and lath will be included in product.

Clifton, Tenn.—Road Construction.—Eagle Turnpike Co. has contract to construct seven miles of pike.

Greenville, Tenn.—Flour Mill.—T. L. Holley, R. F. D. No. 10, will install roller mill and gasoline engine.

Greenville, Tenn.—Furniture Factory.—Greenville Furniture Co. will install machinery to cost \$2700 and engage in furniture manufacturing and general woodworking. C. C. Smith is secretary and general manager. (Mentioned recently.)

Jefferson City, Tenn.—Electric-light Plant.—It is proposed to install electric-light plant, electricity to be generated by water-power. James H. Bundren can possibly give information.

Jellico, Tenn.—Water-works.—The city needs a water-works system and is prepared to consider propositions from engineers and constructing companies as to the general conditions and plans on which such a plant may be based. Address R. B. Baird, Mayor.

Johnson City, Tenn.—Electric Company.—Holston Electric Co. has been organized by L. S. Jones and George W. Keys.

Kingsport, Tenn.—Bridge Construction.—South & Western Railroad is reported as arranging to begin the construction of two steel bridges to span the Holston river; M. J. Caples, general manager and chief engineer, Johnson City, Tenn.

Knoxville, Tenn.—Candy Factory.—Knoxville Candy & Manufacturing Co. incorporated with \$10,000 capital stock by H. E. Harris, W. M. Harris, J. W. Irvine and others.

Knoxville, Tenn.—Foundry.—Reported that the W. J. Oliver Manufacturing Co. will erect building to cost \$100,000, 80x400 feet, of steel construction, at foundry. Car shops and power plant will be added. Capital stock of company was recently increased to \$1,000,000. (Lately mentioned.)

Lawrenceburg, Tenn.—Electric-light Plant and Sewer System.—The city has engaged Kirkpatrick & Johnson of Jackson, Miss., as engineers for the electric-light plant and water-works recently referred to. Bonds for \$25,000 have been voted. Robert Williams is Mayor.

Lexington, Tenn.—Sawmills.—Jones & Woolfolk Co. (recently reported organized) will erect several small sawmills; capital \$75,000. Officers: W. J. Jones, president; J. A. Woolfolk, vice-president; H. E. Graper, secretary.*

Lonsdale, Tenn.—Foundry.—Lonsdale Foundry Co. will erect two-story addition 30x138 feet. This company was organized some time ago by John T. Ammons, Arthur Richards and others.

McMinnville, Tenn.—Road Construction.—Warren county has voted affirmatively the issuance of \$150,000 of bonds for constructing pike roads. Address County Commissioners.

Memphis, Tenn.—Lumber.—Nickey-Dickson Lumber Co. incorporated by S. M. and W. E. Nickey, John S. and James L. Dickson and U. S. Lambert.

Nashville, Tenn.—Fertilizer Plant.—Armour Fertilizer Co. is reported as having plans prepared for erection of plant in West Nashville.

Nashville, Tenn.—Bottling Works.—Heck & Co. incorporated with \$5000 capital stock by P. McF. Allen, C. E. Heck, H. B. Allen, L. B. Pardue and others.

Nashville, Tenn.—Furniture Factory.—Jamison Manufacturing Co. is preparing to enlarge its plant; Major R. H. Dudley, president.

Parsons, Tenn.—Cotton Gin and Warehouse.—Farmers' Union has been organized to build cotton gin and warehouse; G. S. Barry, president; J. R. Smith, vice-president; E. J. Houston, secretary, and J. F. Houston, treasurer.

Selmer, Tenn.—Sawmill.—Alexander Bros. contemplate establishing plant for sawing dogwood and persimmon blocks for manufacturers of bobbins and shuttles. They want to correspond with manufacturers of bobbins and shuttles.*

Smithville, Tenn.—Flour Mill.—E. J. Evans & Son will improve 50-barrel mill.

Sparta, Tenn.—Timber Development.—John M. Welch, J. T. Anderson, J. R. Tubb and J. A. Wilson have purchased 2557 acres of timber land in White county at about \$45,000.

Tennessee—Phosphate Mining.—Tennessee Valley Phosphate Co. incorporated with \$150,000 capital stock by H. C. Powers, 34 Pine street; Richard W. Hubbell, 45 Wall street, and Louis F. Dodd, 52 Broadway, all of New York, N. Y.

TEXAS.

Alto, Texas—Lumber.—Summer & Musick Lumber Co. incorporated with \$100,000 capital stock by T. A. Bounds, W. H. O'Neill and J. R. Musick.

Amarillo, Texas—Water-works.—Potter County Water Supply Co., recently reported incorporated, has selected for engineer in charge W. Kiersted, 58 Water-Works Building, Kansas City, Mo.; manager, John K. Bryden, Times Building, Pittsburg, Pa.

Arlington, Texas—Light, Power, Ice and Water Plants.—Arlington Light, Power, Ice & Water Co. incorporated with \$40,000 capital stock by W. M. Dugan, W. C. Weeks and G. C. Kay.

Aubrey, Texas—Signal-board Attachments. Gates Safety Signal Board Attachment Co. incorporated with \$5000 capital stock by W. T. Gates, S. C. Henderson, J. A. Rhodes, R. D. Benson and others; offices also in Fort Worth, Dallas and Austin, Texas.

Austin, Texas—Collar Plant.—W. T. Wroe & Sons, now operating plant with annual capacity of 8000 sets of harness and 2500 saddles, have recently installed collar department with weekly capacity of 60 dozen.

Ballinger, Texas—Sewerage.—F. D. Perkins, McKinney, Texas, and associates have franchise to construct sewerage system.

Bartlett, Texas—Cotton Gin.—Fowler Bros. will erect cotton gin.

Beaumont, Texas—Grain Elevator.—McFaddin-Wiess-Kyle Rice Milling Co. has awarded contract to R. C. Stone & Co., Springfield, Mo., for erection of steel elevator for grain purposes to be built according to the Stone system, which is that of steel tanks, each tank holding only a certain amount of grain, but all worked in conjunction with one another. New elevator will have a capacity of 140,000 pockets and will consist of 30 steel tanks, each having a capacity of 3000 pockets. Tanks will be imbedded in concrete. About \$30,000 will be expended.

Beaumont, Texas—Oil Wells.—Tribune Oil Co. incorporated with \$10,000 capital stock by Underwood Nazro, Frank F. Black and Singleton Bryan.

Benavides, Texas—Telephone System.—Benavides Telephone Co. incorporated with \$5000 capital stock by B. B. Wright, Benavides; Oscar Thompson and Jose A. Angel, both of Hebronville, Texas, and others to operate telephone system in Neuces, Duval, Webb and other counties.

Berclair, Texas—Cotton Gin.—Farmers' Gin Co. incorporated with \$5000 capital stock by J. J. Greathouse, J. B. Shelton and D. R. May.

Bloomington, Texas—Cannery.—Navarro Canning Co. incorporated with \$10,000 capital stock by Dr. J. E. Greene, L. E. McCormick and others.

Brownwood, Texas—Candy Factory.—Walker-Smith Company is asking for bids for erection of brick building to be equipped as candy factory.

Cleburne, Texas—Water-works.—Cleburne Water & Ice Co. has been sold for about \$100,000 and reorganized with Philip Jones, Tyler, Texas, president; L. W. Chase, Cleburne, vice-president, and John Ingle, Grandview, Texas, secretary.

Columbia, Texas—Hardware.—C. W. Cragle Hardware Co. of Columbia and Angleton, Texas, incorporated with \$10,000 capital stock by J. G. Faickney, J. C. Cragle, G. W. Cragle and B. R. Cragle.

Cornhill, Texas—Cotton Gin.—Valley Union Gin Co. incorporated with \$6000 capital stock by H. A. Miller, W. G. Harrison, D. R. Saylor, J. N. May and others.

Corsicana, Texas—Brick Plant.—C. A. Benton has purchased land and will establish brick plant.

Dale, Texas—Telephone System.—J. A. Ward and others will construct telephone system and erect exchange.

Dallas, Texas—Machine Company.—Edward A. Menzies Machine Co. incorporated with \$10,000 capital stock by Edward A. Menzies, J. B. Moses and T. W. Burns.

Dallas, Texas—Electric Appliances.—Electric Appliance Co. incorporated with \$10,000 capital stock by Davis McMakin and N. B. Traylor of Dallas, Willard W. Low and Thos. I. Stacy, Chicago, Ill.

Dallas, Texas—Mining and Manufacturing. Grahamite Company, 315-18 North Texas Building (recently reported incorporated), has made J. E. Powers president and John A. Ewton manager.*

Dallas, Texas—Oil Wells.—Border Oil Co. incorporated with \$25,000 capital stock by John R. McDonough, J. G. Fry and others.

Dayton, Texas—Oil Wells.—Tidal Wave Oil Co. incorporated with \$3500 capital stock by Charles Wilson, William L. Douglas, W. S. Willey and others.

Denison, Texas—Shoe Factory.—William Champion and E. A. Williams, Roxbury, Mass., are reported as seeking location in the South for shoe factory.

Dublin, Texas—Land and Cattle Company. Latham Land & Cattle Co. incorporated with \$150,000 capital stock by J. H. Latham, J. T. Morgan, L. Longley and others.

Eagle Pass, Texas.—Coal Mines.—Olmos Coal Co. has purchased mineral rights to 3500 acres of coal land. One mine is at present in operation, and it is proposed to open two more. Ernesto Madero, Monterey, Mex., and L. M. Lamar, Sabinas, Mex., are principal stockholders.

Eagle Pass, Texas—Coal Mines.—Lamar Coal Co. is proceeding with the development of 7500 acres of coal land near Eagle Pass. It is understood that orders have been placed for new machinery and that various buildings to contain engines, boilers, pumps, etc., cottages for miners and a spur track to connect with the main line of the Southern Pacific Railway are in course of construction. A dam to impound about 15,000,000 gallons of water for use in connection with mining operations has already been built;

L. M. Lamar, president; J. W. Ritchie, vice-president, and U. J. Backus, secretary-treasurer. (Referred to May 2.)

Ennis, Texas—Cotton Gin.—Farmers' Gin Co. incorporated with \$12,500 capital stock by J. B. Caldwell, W. C. Merritt, Alex B. Caldwell and others.

Evant, Texas—Cotton Gin.—Evant Gin Co. incorporated with \$6000 capital stock by J. E. Gerald, E. E. Watson and W. T. Thorne.

Fort Worth, Texas—Roofing and Manufacturing.—Fort Worth Roofing & Manufacturing Co. has been incorporated.

Galveston, Texas—Development Company.—Galveston Development Co. incorporated with \$50,000 capital stock by Joseph Lobitt, Isaac Heffron and others.

Galveston, Texas—Abattoir.—Reported that the John Finnigan Company, Houston, Texas, will erect abattoir on Galveston Island.

Greenville, Texas—Sewerage.—John W. Maxcy, City Engineer, Houston, Texas, has contract to construct sanitary system of drainage, sewers, etc. (Bond issue of \$40,000 was reported May 16 as having been voted affirmatively.)

Greenville, Texas—Lumber.—R. M. Delaney Lumber Co. incorporated with \$25,000 capital stock by R. M. Delaney, R. H. Rheine, M. H. Delaney and H. M. Hassell.

Hartley, Texas—Supplies.—North Texas Supply Co. incorporated with \$20,000 capital stock by F. E. Neeley, J. J. Taylor, W. H. Denton and others.

Hempstead, Texas—Electric-light Plant.—J. C. Amaler will proceed with the organization of company to construct and operate electric-light plant, permit having recently been secured to erect poles, etc.

Henrietta, Texas—Gin and Cotton Company.—Planters' Gin & Cotton Co. incorporated with \$10,000 capital stock by J. A. Levy, Alex Mitchell, G. J. Wilson and others.

Hereford, Texas—Electric-light and Gas Plants.—City has granted 30-year franchise to J. N. Jacobson and H. G. Tucker for erection of electric-light plant and gas works.

Houston, Texas—Can-manufacturing Plant. Houston Can Manufacturing Co. is now operating plant with capacity of \$20,000 cans daily and expects to increase output to 50,000 within a short time. Company has contract to furnish State Canners' Association with all cans required; M. P. Walker, president and manager; R. White, vice-president, and T. R. Joseph, secretary-treasurer.

Houston, Texas—Lumber.—Barrow Lumber Co. incorporated with \$10,000 capital stock by Ben J. Barrow, A. D. Barrow and W. W. Johnson.

Huntsville, Texas—Oil Mill.—Huntsville Cotton Oil Co. will make improvements to plant. Following will be installed: New gin plant, 125 bales capacity, to be operated by electrically-transmitted power from main steam plant; modern oil-mill machinery, concrete floors in mill buildings, galvanized-iron roofing, etc. Improvements will cost about \$12,000.

Llano, Texas—Granite and Marble Works. Llano Marble & Granite Co. (recently reported incorporated under San Antonio, Texas) has taken over Teich property near Llano; will install additional machinery and increase capacity of plant; will engage in quarrying and manufacturing granite and marble; officers, J. S. Sweet, president; G. Bodet, secretary; Frank Teich, manager; main address, at present, San Antonio, Texas, care of Halliday-Sweet Realty Co.

Moody, Texas—Cotton Gin.—Young, Routh & Willis will erect cotton gin; 22x90 feet; cost \$5000; architect, Elmo Routh; engineer, John Lockwood. (Mentioned recently.)

Nacogdoches, Texas—Water-works.—Bids will be received by Mayor and City Council until June 3 for purchase of all pipe, hydrants and other equipment required in extension of present water system. O'Neill Engineering Co. is in charge. (Referred to recently.)

New Birmingham (P. O. Rusk), Texas—Mining.—New Birmingham Company incorporated with \$20,000 capital stock by Frederick W. Arnold, Erton P. Yates and W. Frank Knox.

Paris, Texas—Concrete Manufacturing.—Paris Concrete Manufacturing Co. incorporated by John A. Porter, Paul F. Mueller, George R. Hancock and others.

Richmond, Texas—Bridge Construction.—Fort Bend county will vote July 25 on the issuance of \$30,000 of bonds for steel bridge over the Brazos river at Rosenberg and \$5000, to be supplemented by an equal amount by Wharton county, for bridge over the Bernard river, west of Nudville. Address County Commissioners.

Santa Anna, Texas—Water-works.—Santa Anna Business League is contemplating establishment of water-works system. O'Neill Engineering Co., Dallas, Texas, will be asked to make estimates.

Santa Anna, Texas—Cotton-oil Mill.—C. P. Morgan and other members of Santa Anna Business League and M. Sansom Company of Fort Worth, Texas, are interested in projected cotton-oil mill company to be organized with \$50,000 capital stock.

Seguin, Texas—Electric-light Plant.—Water-Works Trustees will expend \$10,000 in improvements to electric-light plant recently purchased.

Sour Lake, Texas—Lumber.—Thompson & Ford Lumber Co. incorporated with \$400,000 capital stock by A. C. Ford, J. C. Harrison, W. B. Ward, Jr., and others.

Texas City, Texas—Food-product Manufacturing.—Texas City Food Product Manufacturing Co. incorporated with \$4000 capital stock by George E. Whitney, John H. Sicher, D. H. Wilson and others.

Willis, Texas—Lumber.—Montgomery County Lumber Co. incorporated with \$10,000 capital stock by Bernard Brown, Russell Brown, Russell Stapp and others.

Winnboro, Texas—Lumber.—Winnboro Lumber Co. incorporated with \$10,000 capital stock by T. J. Gibson, T. G. Carlock, S. F. Nelson and others.

Wortham, Texas—Cottonseed-oil Mill.—Wortham Cotton Oil Co., recently reported incorporated, states it has bought plant of former Wortham Cotton Oil Co. and has re-chartered; capital stock \$15,000. New machinery will be installed at cost of \$3000 to \$4000.

Yoakum, Texas—Cottonseed-oil Mill.—Yoakum Cotton Oil Co. (recently reported organized) will erect building; two presses, capacity 30 tons; machinery purchased; William Green, Shiner, Texas, president.

Yorktown, Texas—Creamery.—Yorktown Creamery Co. incorporated with \$5000 capital stock by Richard Eckhardt, Charles U. Eckhardt and Gus Eckhardt.

VIRGINIA.

Abingdon, Va.—Acetylene-gas Plant.—J. E. Deaton and others have organized company to build acetylene-gas plant.

Alexandria, Va.—Speed-Ball Company, incorporated with \$100,000 capital stock by Geo. P. Sacks, Frank Pitzer, H. H. McKee and others.

Bedford City, Va.—Contracting.—Hagan-Kidd Contracting Co. incorporated with \$10,000 capital stock by C. T. Hagan, James R. Guy, Jr., and E. M. Kidd, Lynchburg, Va.

Berkley, Va.—Machine Works.—Berkley Machine Works, operated by Clark & Wood, will rebuild plant recently burned at a loss of \$10,000.

Berkley, Va.—Sawmill.—George H. Frey will rebuild sawmill recently burned at a loss of \$5000.

Big Stone Gap, Va.—Builders' Supplies.—Big Stone Gap Builders' Supply & Manufacturing Co. incorporated with \$50,000 capital stock. A. L. Witt is president and J. B. Ayers secretary-treasurer.

Bristol, Va.—Fruit Growing.—Peninsula Fruit Corporation has been organized; will grow pineapples in Florida; officers, J. M. Sample, president; M. P. Burks, Jr., vice-president; Donald T. Stant, secretary and treasurer.

Charlottesville, Va.—Coal Mines.—Charlottesville Coal Corporation incorporated with \$60,000 capital stock by C. S. Charlton, Charlottesville, president; John Ingles, vice-president, and F. Powell, secretary, both of Johnson City, Tenn.

Colonial Beach, Va.—Land Improvement.—West End Colonial Beach Co. incorporated with \$5000 capital stock; Francis D. Yates, president; F. G. Butts, vice-president; W. H. Klopfer, treasurer, and J. N. Hornbaker, secretary, all of Washington, D. C.

Dickenson County, Va.—Timber Development.—Reported that Yellow Poplar Lumber Co., Coal Grove, Ohio, will arrange for the development of 20,000 acres of timber land and has organized company to construct railway from Pike county, Kentucky, to the tract for transporting lumber. James Hatcher, Pikeville, Ky., will superintend construction of road and removal of timber.

Fredericksburg, Va.—Electric-light Plant.—Engineer E. T. Trafford has submitted report in regard to erection of municipal incandescent-light plant, estimated cost being between \$36,000 and \$40,000.

Lowmoor, Va.—Iron Furnace.—Lowmoor Iron Co. will consider increasing capital stock from \$1,500,000 to \$2,000,000.

Massaponax, Va.—Flour Mill.—J. A.

Vaughan has purchased the Smith Mill and will install complete roller plant.

Norfolk, Va.—Brush Works.—Ox Fiber Brush Co., Frederick, Md., is reported as contemplating establishing plant in Norfolk; Paul McEwen, superintendent.

Norfolk, Va.—Asphalt Plant.—City is advertising for bids for installing municipal asphalt plant, specifications for which have been prepared by the City Engineer.

Norfolk, Va.—Land Improvement.—Sussex Realty Co. incorporated with \$50,000 capital stock. William B. Cocke, Sussex, Va., president; M. R. Sutherland, Lawrenceville, Va., secretary.

Norfolk, Va.—Navigation.—Norfolk Navigation Co. incorporated with \$5000 capital stock. J. M. Wolford is president, W. L. Davis vice-president, G. W. Scoble treasurer and Gordon Paxton secretary.

Norfolk, Va.—Manufacturing.—Pure Products Co. incorporated with \$50,000 capital stock. Thomas B. Scott is president and treasurer and M. D. Freney secretary.

Norfolk, Va.—Cigar Factory.—Manning-Leigh Cigar Co. incorporated with \$10,000 capital stock. C. H. Sheppard is president, W. R. Leigh vice-president and J. Manning secretary-treasurer.

Radford, Va.—Publishing.—Radford Advance Publishing Co. incorporated with \$10,000 capital stock. J. L. Vaughan is president, J. Hoge Tyler vice-president and J. A. Baird secretary-treasurer.

Richmond, Va.—Bridge.—James D. Crump, George B. Wilson, S. P. Jones and others have been appointed as committee to organize company for rebuilding the old Mayo bridge connecting Richmond with Manchester.

Richmond, Va.—Bakery.—L. Cohen & Sons, 204 17th street, have purchased site at \$9000 on which to erect and equip bakery.

Richmond, Va.—Label Printing.—Anderson Label Printing Co. incorporated with \$10,000 capital stock by Julian C. Anderson (president), W. M. Anderson and R. M. Anderson.

Richmond, Va.—Land Improvement.—Brookdale Corporation has been organized with \$37,500 capital stock to develop about 90 acres of real estate. D. R. Creech, Jr., president; Langbourne M. Williams, vice-president; C. C. Walton, Jr., secretary, and Irving E. Campbell, treasurer and general counsel.

Roanoke, Va.—Hat Company.—Roanoke Hat Co. incorporated with \$50,000 capital stock by James C. Moler (president and treasurer), J. B. Andrews and S. S. Burch.

Staunton, Va.—Distillery.—E. A. Fulcher Distilling Co. incorporated with \$10,000 capital stock. E. A. Fulcher is president, L. A. Fulcher vice-president and W. C. Fulcher secretary-treasurer.

Waverly, Va.—Milling.—Waverly Milling Co. will enlarge plant.

WEST VIRGINIA.

Beckley, W. Va.—Bottling and Ice Plant.—Raleigh Bottling Works will establish plant for bottling soft drinks and manufacturing ice; will erect and equip building 60x120 feet at cost of \$18,000 to \$20,000; ice plant to have 25 tons capacity; architects, Clark & Krebs. Officers: Thomas H. Wickham, president; J. J. Duffy, vice-president; W. L. Foster, general manager; Ashton File, secretary and treasurer. (Recently mentioned.)

Bluefield, W. Va.—Public Improvements.—City will vote June 4 on the issuance of \$100,000 of bonds for improving streets, city buildings and better equipment for fire department. Address The Mayor.

Bluefield, W. Va.—Public Improvements.—City will vote June 4 on the proposed issuance of \$100,000 of bonds for improving and extending streets, improving and completing sewerage system, improving and enlarging public buildings and providing additional facilities and buildings for fire department; E. E. Cater, Mayor.

Bristol, W. Va.—Oil and Gas Plant.—Godfrey L. Cabot, Boston, Mass., recently reported (under Clarksburg, W. Va.) as having purchased controlling interest in Bristol Oil & Gas Co., states that no important changes or enlargement will be made in the near future.

Charleston, W. Va.—Window-glass Factory.—Dunkirk Window Glass Co., recently mentioned as to establish glass plant, will erect and equip buildings at cost of \$75,000; buildings to be of cement blocks, with 1000 squares roofing surface; product of plant, 30 carloads window glass per month; general equipment will be removed to Charleston from Dunkirk, Ind.; plans for building prepared by Geo. A. Schlossstein, president and general manager; principal address, Dunkirk, Ind., until September 1.*

Charleston, W. Va.—Coal Mines.—Acme

Steam Coal Co. incorporated with \$160,000 capital stock by Edward Roderick, S. J. Owen and Richard Roderick, all of Scranton, Pa., and others.

Clarksburg, W. Va.—Sand and Fertilizer Works.—Union Sand & Fertilizer Co., Box 482, has been incorporated to manufacture and deal in sand and fertilizers. Officers are James T. Drudy, president and treasurer; J. H. Irving, secretary; David M. Morris, general manager. Building has been purchased, to which will be added large shops for storing, bagging and shipping fertilizers and fertilizer materials; cost of buildings and equipment, \$25,000; capacity, 100 tons building sand per day and about 10,000 tons fertilizer per year.*

Flemington, W. Va.—Bone Mill.—Heneta Bone Co. (recently reported under Huntington, W. Va.) will erect buildings and install machinery; buildings to be of frame, two stories, 60x72 feet; steel siding; cost \$5000; will manufacture bone and grit poultry food, 15 tons daily. Officers are W. C. Currey, president; Isaac D. Martin, secretary; Thos. W. Brohard, manager. Two incorporators (C. F. Monroe and J. W. Davidson) are of Flemington, instead of Huntington, as was incorrectly stated in former notice.*

Folsom, W. Va.—Gas-pumping Station.—Carnegie Gas Co. is reported to erect gas-pumping station.

Glen Jean, W. Va.—Lumber.—Wellman Lumber Co. incorporated with \$5000 capital stock by O. F. McCoy, L. D. Marshall, H. E. Wilson and others.

Grafton, W. Va.—Gas Line.—John T. McGraw, McGraw Oil & Gas Co., has secured permit to lay pipe through the city to distribute natural gas.

Harrison, W. Va.—Coal Mines.—A. M. Inskip, Moorefield, W. Va., has sold coal property near Harrison to Lee Ott and associates; purchase price \$24,700.

Huntington, W. Va.—Boiler Works.—Huntington Boiler Works, T. J. McAndrews, proprietor, now occupying a rented building, expects to erect modern shop next fall, expending about \$6000 for building, machinery and tools.

Mason, W. Va.—Salt Manufacturing.—Dixie Salt Manufacturing Co. incorporated with \$100,000 capital stock to mine and bore for salt, gas and oil and to refine and manufacture same by E. M. Craig, Frank Cox, J. H. Shrewsbury, all of Charleston, W. Va., and others.

New Martinsville, W. Va.—Glass Plant.—New Martinsville Glass Manufacturing Co., recently mentioned as having plans prepared for new building to replace burned structure, will erect concrete and brick structure 120x230 feet, to cost, with equipment, \$45,000 to \$50,000; product, table glassware, lamps and decorated goods. Officers: F. W. Clark, president; S. B. Martin, vice-president; J. F. Martin, treasurer; D. W. Baird, secretary; E. D. Mooney, manager.

Parkersburg, W. Va.—Water-works.—Board of Affairs has elected H. H. Moss, W. G. Peterkin, Ben S. Pope and W. M. Hall as members of committee to arrange for establishment of new water-works. (Recently mentioned.)

Parkersburg, W. Va.—Sewerage.—Sealed proposals will be received by Board of Affairs until June 6 for furnishing all material and labor for the construction of the extension of two-ring brick storm sewer six feet in diameter; J. V. Dunbar, City Engineer.*

Princeton, W. Va.—Street Improvements.—Contract will be awarded for macadamizing streets, expending \$23,000; H. G. Woods, Mayor.*

Wheeling, W. Va.—Lumber.—Hood Lumber Co. incorporated with \$300,000 capital stock by C. M. Hood and T. E. Hood of Wheeling, J. M. Crawford and F. O. Hevener, Parkersburg, W. Va., and others.

Wheeling, W. Va.—Sawmill.—Reported that Aaron Johnson, interested in the establishment of proposed band-saw mill on the Back fork of the Elk river, will soon install machinery and operate the plant.

Wheeling, W. Va.—China Manufacturing.—Warwick China Co. will erect three-story building of brick and wood, costing \$5000, to be used for decorating department, replacing burned structure; Kileves Lumber Co., contractor.

Wheeling, W. Va.—Steel-ladder Plant.—Albert A. Franzheim and others are organizing the Wheeling Flexible Ladder Co. to manufacture a new flexible steel ladder for use on railroads, in hotels and other buildings.

Whyte (not a P. O.), W. Va.—Lumber.—Ganman Lumber Co. incorporated with \$15,000 capital stock by J. B. Morgan, Leroy See, A. F. Hartman, A. C. Hartman, all of Elk-ins, W. Va., and others.

Williamson, W. Va.—Coal Mines.—Winifrede Consolidated Coal Co. incorporated with \$50,000 capital stock by W. T. Poole, M. T. Persenger, Alex Bishop and others.

Williamson, W. Va.—Coal Mines.—It is reported F. H. Evans of Williamson and W. W. Houston, Philadelphia, Pa., have completed arrangements with a syndicate in London, New York and Boston to purchase about 100,000 acres of coal land in Mingo and McDowell counties. Col. C. H. Evans, Chicago, Ill., and Russell Palmer, New York, N. Y., engineers, have made examinations of the property.

INDIAN TERRITORY.

Ardmore, I. T.—Cotton Mill.—Reports state that S. K. Dendy of Waltham, S. C., contemplates establishing a cotton mill at Ardmore.

Bartlesville, I. T.—Sewerage.—City is considering plans for construction of sewerage; cost \$40,000; W. H. Whaley, City Engineer. (Referred to April 18.)

Comanche, I. T.—Water-works.—Sealed bids will be received by Mayor and City Council until May 23 for purchase of all pipe, hydrants and other supplies required in construction of complete system of water-works. O'Neil Engineering Co., Dallas, Texas, is in charge. (Referred to recently.)*

Eufaula, I. T.—Water-works.—City has voted affirmatively the issuance of \$35,000 of bonds for water-works; referred to April 11; J. W. Thornton, secretary Chamber of Commerce.

Muskogee, I. T.—Lumber.—Jurden-Alken Lumber Co. incorporated to manufacture and deal in hardwoods. R. L. Jurden, Kansas City, Mo., and Benjamin Alken, Cincinnati, Ohio, are interested.

Ryan, I. T.—Cotton-oil Mill.—Company has been organized for establishment of cotton-oil plant. Mill will be built, for which plans and specifications are now being drawn; cost of plant \$50,000; bids to be open soon; W. F. Guest, secretary.

OKLAHOMA TERRITORY.

Alone, O. T.—Telephone System.—Valley Green Telephone Co. incorporated by F. M. P'burn, J. H. Elkins and J. D. Durham.

Binger, O. T.—Telephone System.—White Bread Telephone Co. incorporated by M. V. Stuart, C. S. Daugherty, D. C. Costello and others.

Davenport, O. T.—Publishing.—Davenport Leader Publishing Co. incorporated by E. A. Anderson, Charles T. Hedges, W. Jones, J. S. McCue and others.

El Reno, O. T.—Railroad Shops, etc.—Chicago, Rock Island & Pacific Railway Co. will erect roundhouse, shops, steel water tank, etc.; roundhouse brick, 24 stalls; concrete foundation; floors of creosoted blocks; reading, locker and wash rooms; modern plumbing; cement wainscoting; sheet-metal lockers, finished with baked enamel; shops to be of brick; 60x165 feet; steel trusses; contain machine and woodworking shops, store-room, office, dynamo and boiler rooms; brick chimney 125 feet; boiler-room equipped with four 125-horse-power boilers; plumbing and lockers; water tank will be of steel, with concrete foundations; double cylinder pit; steel 75-foot turntable; concrete coping walls; brick pit; fireproof oilhouse will also be built; A. T. Hawk, architect; J. B. Berry, chief engineer, both of Chicago, Ill. (Recently mentioned.)

Guthrie, O. T.—Cottonseed-oil Mill.—Farmers' Union Co-operative Oil Mill Co. incorporated with \$100,000 capital stock by E. S. Elliott, John Devereux, J. C. Wicke and others.

Mangum, O. T.—Sewerage.—Sealed proposals will be received by Forrest Shell, City Clerk, until May 27 for furnishing material and constructing system of sewers; J. W. Ryder, Granite, O. T., engineer.*

Oklahoma City, O. T.—Lumber.—Bear Creek Lumber Co. incorporated with \$50,000 capital stock by Lee Van Winkle, C. T. Ingalls, L. A. Barley and others.

Oklahoma City, O. T.—Stump-pulling Machine.—Groth Stump-Pulling Machine Co. incorporated with \$50,000 capital stock by A. J. McMahan, Oklahoma City; Bernard L. Goth and L. D. Moore, St. Louis, Mo.

Oklahoma City, O. T.—Canal.—D. P. Marum, Woodward, O. T., and others are reported as contemplating the construction of canal 200 miles long, 50 feet wide and 10 feet deep from Oklahoma City to Webbers Falls, I. T., at a cost of about \$10,000,000.

Quinlan, O. T.—Telephone System.—Quinlan & Cedarvale Free Exchange Telephone Co. incorporated with \$5000 capital stock by E. P. Ford, Ben Huff, Henry Lumsey and others.

Reeding, O. T.—Telephone System.—Reeding Telephone Co. incorporated by G. B.

Caron and B. F. Cole of Reeding and G. T. Dixon of Okarche, O. T.

Texhoma, O. T.—Telephone System.—Texhoma Telephone Co. incorporated with \$5000 capital stock by I. J., T. E. and Gertrude Osborne.

Tivoli, O. T.—Telephone System.—Spring Creek Telephone Co. incorporated by A. Cornwell, George W. Seybert and C. C. Cornforth.

Tivoli, O. T.—Telephone System.—D. B. Mutual Telephone Co. incorporated by Alfred Dorsett and L. M. Cagley of Tivoli, L. B. Porter, P. A. Shepherd and J. A. Jones, Orion, O. T.

Walter, O. T.—Cotton Gln.—Walter Gln Co. incorporated with \$10,000 capital stock by Robert H. and M. E. Sherman and H. F. Tripp.

BURNED.

Berkley, Va.—George H. Frey's sawmill, loss \$5000; Berkley Machine Works, operated by Clark & Wood, loss \$10,000; Norfolk Wood-working Corporation, loss \$3000.

Bluefield, W. Va.—Dupont Powder Co.'s plant at Nemours, W. Va.; loss \$15,000.

Buford, Ga.—Bona Allen's glue factory; loss \$12,000.

Camden, Ark.—Camden Oil Mill's cottonseed warehouse; loss \$80,000.

Casar, N. C.—H. M. Angle's shingle mill; loss \$6000.

Deer Creek, Md.—Husband Flint Mill, operated by the American Pottery Supply Co., Baltimore, Md.

Elizabeth City, N. C.—Kramer Bros. & Co.'s warehouse.

Greenville, S. C.—Recent report of fire at waste mill of American Spinning Co. was incorrect; company has no waste mill; fire merely damaged a small building.

Leeville, La.—Nona Mills Co.'s warehouse; loss \$15,000.

Little Rock, Ark.—Ferguson Mills' drykiln; loss \$5000.

Sanders, Ky.—W. A. and G. W. Shirley's tobacco warehouse.

Perry, Fla.—Calhoun House, owned by W. F. Calhoun; loss \$10,000.

Shelby, Ala.—Shelby Iron Co.'s No. 1 furnace.

BUILDING NOTES.

* Means machinery, proposals or supplies are wanted, particulars of which will be found under head of "Machinery, Proposals and Supplies Wanted."

Abingdon, Va.—Residence.—Burnett & Kearfott of Bristol, Tenn.-Va., are architects for residence for Dr. J. W. Cummins; press brick veneer; colonial columns; leaded glass; brick mantels; metal shingles; plumbing and electric wiring; cost \$4000.

Albany, Ga.—Warehouse.—F. F. Putney, Putney, Ga., will erect warehouse; two buildings, one to be 42x210 feet, two stories; other building 34x55 feet, three stories; fireproof construction; steam heat; electric lighting; electric elevators; cost of buildings, \$36,000; architect, T. W. Smith, Columbus, Ga.; contractor, C. D. Smith.*

Alexandria, La.—City Hall.—City has not yet let contract for erection of city hall, for which plans were made by E. J. Hull. (Recently mentioned.)*

Allendale, S. C.—Passenger and Freight Depot.—Charleston & Western Carolina Railway Co. contemplates erection of brick combination passenger and freight depot and frame-covered shed; brick part of building to be 40x133 feet, and covered platform 40x96 feet; bids will be asked. A. H. Porter, engineer of roadway, Augusta, Ga., can be addressed.

Amarillo, Texas.—Opera-house.—Amarillo Opera-House Co. incorporated with \$40,000 capital stock. It has purchased site 60x140 feet and is having plans prepared for erection of building to have seating capacity of 1200.

Americus, Ga.—Theater.—William Dudley will overhaul interior of opera-house and install electrical equipment.

Anderson, S. C.—Hospital.—Mulkey & Davis have contract at \$17,500 to erect building for Anderson Hospital Association; plans by J. H. Casey; building to have steam heat and electric lighting.

Anniston, Ala.—Building.—Algernon Blair, contractor, has secured permit to erect building for the Weather Bureau to cost \$10,500.

Anniston, Ala.—Warehouse.—Farmers' Union Warehouse Co. incorporated with \$5000 capital stock by John H. Wilson, G. W. Eichelberger, Walter L. Jones and others.

Arlington, Tenn.—School Building.—School Board, H. S. Griffin, secretary, has secured \$3000 to erect two-story addition to school building. Structure will be constructed of brick or limestone; cost is said to be \$8000.

Ashdown, Ark.—Courthouse.—Contract has been let to R. S. O'Neil for erection of courthouse recently mentioned; building to be two stories; press brick; cost \$25,000; architect, Sidney Stuart.

Athens, Ga.—School Building.—Bids are being received for erection of new agricultural building for University of Georgia; building to be 264 feet in length; depth, 60 to 75 feet; three stories; pressed brick and terra-cotta; tile roof; steam heat; architect, E. E. Dougherty, 313 Candler Building, Atlanta, Ga.

Athens, Ga.—Agricultural Building.—Edward Emmett Dougherty has perfected plans for proposed building of School of Agriculture at University of Georgia, for which Legislature appropriated \$100,000. Bids for erection will be closed about May 25. Structure will be 264x75 feet; two stories with basement, each story to be 15 feet high; exterior of light buff pressed brick with terra-cotta trimmings, cornices with open wood construction, red tile roof, stone foundation and steps; Renaissance style of architecture; to be equipped with new system of heating, an indirect system of fresh air being driven over steam pipes and propelled to various rooms with fans; electric-lighting fixtures; gas apparatus in laboratories; freight elevator; refrigerating plant; basement to have tile and cement flooring, be equipped as butter and cheese-making depot and contain lockers and shower baths; second floor will be laboratory, devoted to study of chemistry; assembly hall with seating capacity of 500, etc.

Augusta, Ga.—School Building.—County Board of Education has completed financial arrangements for completing the John Milledge School, and construction work will be resumed at once; T. O. Brown, contractor; cost \$100,000.

Baltimore, Md.—Dwellings.—Wilton Snowden, 34 Central Savings Bank Building, Charles and Lexington streets, has purchased a tract of land at the southwest corner of Highland avenue and 12th street, Highland Park, which will be improved, it is said, with a number of residences.

Baltimore, Md.—Railway Terminal Station. Washington, Baltimore and Annapolis Electric Railway Co., Maryland Trust Building, Calvert and German streets, has awarded contract to J. H. Miller, 110 Dover street, for the construction of terminal station at corner Marion and Liberty streets and Park avenue; two stories; 75x100 feet; brick with stone and terra-cotta trimmings; reinforced concrete construction; slag roof; electric wiring and fixtures; sanitary plumbing; steam-heating system; cost \$50,000; Simonson & Pietsch, architects, American Building, Baltimore and South streets.

Baltimore, Md.—Hospital.—Plans have been distributed for the erection of proposed Frank Memorial Building to be erected as an addition to the Hebrew Hospital on East Monument street. Estimating are Wells Bros., 410 Union Trust Building; J. Henry Miller, 110 Dover street; George A. Fuller Company, 1109 American Building; William Ferguson & Bro., 214 Clay street. Louis Levi, architect, American Building.

Baltimore, Md.—Store.—H. P. Cohn, 613 South Broadway, is reported to erect three-story department store at the northeast corner of Broadway and Canton avenue after plans and specifications by Louis Levi, architect, American Building, South and Baltimore streets. Site is 60x70 feet.

Baltimore, Md.—Dwelling.—Chestnut Hill Company has awarded contract to Willis & Mason, 324 West Biddle street, for the construction of two-and-one-half-story frame dwelling, with electric wiring and fixtures and steam-heating system, at Chestnut Hill, Mt. Washington, to cost \$6500; Mottu & White, architects, Professional Building, 330 North Charles street.

Baltimore, Md.—School Buildings.—St. Mary's Industrial School, Wilkens avenue, has awarded contract to J. J. O'Connor, 415 East Lexington street, for the construction of new school building; four stories, 65x90 feet; stone exterior; structural iron and steel; lighting and heating systems; cost \$50,000; Francis E. Tormey, architect, Wilson Building, 301 North Charles street.

Baltimore, Md.—Dwellings.—A. Neffeld, Luzerne and Hoffman streets, will erect 19 two-story dwellings to cost about \$17,000; 15 to be on Keyser street between Lakewood avenue and Luzerne street, and four to be on Luzerne street between Hoffman and Oliver streets.

Baltimore, Md.—Dwelling.—William H.

Waxter, 1319 East Biddle street, has purchased lot east of Park Heights avenue 140x150 feet for the erection of residence.

Baltimore, Md.—Dwellings.—Henry E. Hernes will erect three two-story dwellings on Garrison lane between Hollins and Lombard streets to cost about \$9000 in the aggregate.

Baltimore, Md.—Home.—Baldwin & Pennington, architects, Professional Building, North Charles street, have distributed revised plans for the home to be erected for the Sisters in charge of St. Thomas' Catholic Church at Hampden.

Baltimore, Md.—Dwellings.—Max H. Quitt and associates, who recently acquired about 25 acres of land on Harford road, known as Evelyn Park, are laying off sites preparatory to erecting a number of cottages; houses will be frame and contain 8 and 10 rooms, equipped with gas and electric fixtures.

Baltimore, Md.—School.—J. J. O'Connor, 427 East Lexington street, will probably be awarded contract for the erection of proposed new school building at St. Mary's Industrial School to cost about \$50,000; Francis E. Tormey, architect, Wilson Building, North Charles street.

Baltimore, Md.—Store Building.—Willis & Mason, 324 West Biddle street, have been awarded contract by Mrs. A. Melvin Bay for the construction of store building at 858 North Howard street; four stories, 30x75 feet; brick with stone trimmings; mill construction; electric wiring and fixtures; sanitary plumbing; steam-heating system; elevator; cost about \$9000.

Baltimore, Md.—Warehouse.—I. Ulman & Sons, liquor dealers, 6 West Pratt street, have awarded contract to C. L. Stockhausen, National Marine Bank Building, Gay and Water streets, for the construction of warehouse at 312 Light street; four stories; brick with stone trimmings; slag roof; elevator; cost \$11,500; Louis Levi, architect, American Building, Baltimore and South streets.

Baltimore, Md.—Warehouse.—Crane Company, dealers in steamfitting and plumbing supplies, 624-630 West Pratt street, has purchased lot at 623-629 West Lombard street and will erect three-story brick warehouse on the site, which is 9x171 feet. It is probable that Charles E. Cassell & Son, architects, Law Building, will prepare the plans and specifications for the building.

Baltimore, Md.—Dwelling.—R. Brent Keyser, Keyser Building, Calvert and German streets, has awarded contract to John Cowan, 106 West Madison street, for the construction of dwelling at northeast corner Calvert and Biddle streets; four stories, 40x70 feet; marble exterior; structural iron and steel; electric wiring and fixtures; sanitary plumbing; steam-heating system; cost about \$25,000; Hopkin & Koen, architects, New York city.

Baltimore, Md.—Warehouse.—E. Selckmann, builder, 1808 North Chester street, has been awarded contract for the construction of warehouse at 114 East Lombard street for Shultz & Rosenberger; four stories, 31x59 feet; brick with stone trimmings; structural iron and steel; slag roof; galvanized-iron cornice; electric wiring and fixtures; sanitary plumbing; heating system; elevator; cost \$10,000.

Baltimore, Md.—Store.—Frederick Decker & Sons, 1209 East Biddle street, have contract to erect store front and other improvements at 14 West Lexington street for Mrs. Laura V. Bowie.

Baltimore, Md.—Dwelling.—W. L. Minor, architect, 20 Clay street, has distributed plans for a two-and-a-half-story dwelling to be erected at Forest Park for Justus Dohme, Pratt and Howard streets.

Baltimore, Md.—Dwellings.—C. E. Spalding Company, 213 Courtland street, has purchased the unimproved ground on north and south sides of Wallbrook avenue, between Smallwood and Bentalou streets, and has awarded contract to Meyer & Lambrecht for erection of 30 two-story Philadelphia-style houses.

Baltimore, Md.—Dwellings.—Frank Novak, 800 Duncan street, will erect 10 two-story dwellings on Jefferson street, between Baxter street and Lakewood avenue, to cost about \$12,000.

Baltimore, Md.—Hospital.—Fred Decker & Son, 1209 East Biddle street; John T. Buckley, 916 Bolton street; George A. Blake, 301 Law Building; John Cowan, 106 West Madison street; Morrow Bros., 216 West Saratoga street; Willard E. Harn, 2700 Huntingdon avenue; William H. Porter & Son, 505 East Forrest street; C. C. Watts, 113 Hamilton street; Monmonier & Sorrell, 308 Laurens street; and Henry S. Kippell, 7 Clay street, were invited to submit estimates for the construction of proposed improvements to the Maryland General Hospital. Plans provide for two additional stories on present four-

story structure, the fifth floor to contain five wards, large linen-room, diet kitchen and toilets; sixth floor to contain operating-room surrounded by amphitheater, having seating capacity of 125; etherizing-room, recovery-room, surgery-room, two demonstrating-rooms, diet kitchen, two wards and toilets; operating, surgery, recovery and etherizing rooms to have tiled floors and wainscoting and equipped with sanitary arrangements; J. E. Lafferty, architect, 11 East Pleasant street. Proposals were submitted on May 15.

Baltimore, Md.—Ferry Slip.—Pennsylvania Railroad, local office, Calvert and Baltimore streets, Alexander C. Shand, chief engineer, Philadelphia, Pa., is considering plans for the construction of steel ferry slip at the foot of Boston street.

Baltimore, Md.—Dwellings.—Frank Novak, 800 Duncan street, has purchased tract of land comprising about 10 city blocks and bounded by McDermerry street on the north, Philadelphia road on the south, Potomac street on the east and Lakewood avenue on the west, from the Luzerne Land Co. for residential purposes. It is estimated that 500 two-story dwellings will be erected on the property, about 75 of which will be built during the summer on the following streets: Patuxent, Potomac, Patapasco, Rose, Grove, Orleans, Jefferson, McDermerry, Kenwood avenue, Philadelphia road and others.

Bartow, Fla.—Residences.—E. A. Laws will erect two residences—one to be built of concrete block, have two stories, eight rooms; other to be built of cement veneer with cement-block foundations, eight rooms.

Bartow, Fla.—Store and Lodge Building.—Contract has been let to Bishop & Anderson for construction of store and lodge building (recently noted) to be built for E. A. Laws; to be 52x80 feet, have electric lighting and cost \$7500 to \$9000; architect, John Bishop.

Baxley, Ga.—Courthouse.—Plans prepared by H. L. Lewman, Louisville, Ky., have been adopted for erection of \$50,000 courthouse at Baxley.

Beaumont, Texas.—School Building.—School Board has accepted plans prepared by F. W. Steinman for school building in the Ogden addition; two stories and basement; six rooms; brick; cost \$15,000. Bids for its erection will be opened May 23. Mr. Steinman will also prepare plans for a four-room school building in the West End.

Beaumont, Texas.—Building.—Herman Weber has contract for erection of addition to two-story building for Mrs. J. S. Goodhill; addition, about 60x100 feet; two stories; passenger elevator; cost of completed building \$15,000; architect, H. G. Maurer.

Belhaven, N. C.—School Building.—City has voted affirmatively the issuance of \$30,000 of bonds to erect graded-school building. Address The Mayor.

Bethune, N. C.—Store Buildings.—C. S. Nicholson contemplates erecting store buildings, but has not made definite decision; may use concrete blocks or bricks.

Birmingham, Ala.—Building.—Reported that Loveman, Joseph & Loeb, M. V. Joseph, senior member, owning lots adjoining present building, 100x140 feet and 40x100 feet, respectively, will erect 10-story steel-frame building on sites.

Birmingham, Ala.—Building.—Jefferson county will vote June 24 on the issuance of \$500,000 of bonds for erection of combined courthouse and jail building; John T. Reed, president board of revenue.

Boonville, Mo.—Assembly Hall.—Work will soon begin on the erection of proposed assembly hall for the Missouri Training School for Boys after plans by Barnett, Haynes & Barnett, St. Louis, Mo. Building will have seating capacity of 750, with gallery to seat 150, and cost \$30,000. Col. R. C. Clark is in charge of construction.

Brenham, Texas.—School Building.—City has voted affirmatively the issuance of \$30,000 of bonds to erect school building. Address The Mayor.

Bristol, Tenn.—Residence.—Mrs. W. A. Porter will erect residence; frame; two stories; hardwood finish; colonial columns; leaded glass; hot-water heat; plumbing and electric wiring; cost \$5500; Burnett & Kearfott, architects.

Brooks, Ga.—Bank Building.—Bank of Brooks will erect bank building; Sam Boykin, president.

Brownwood, Texas.—Business Building.—Coggin Bros & Ford, bankers, contemplate erecting building.

Brownwood, Texas.—Dormitory.—Daniel Baker College will soon begin the erection of girls' dormitory, to be constructed of native stone and cost \$25,000.

Brunswick, Ga.—Courthouse and Jail.—Election will be held June 19 on issuance of

bonds for completion of new courthouse and erection of jail. No plans have yet been made for jail or architect employed. (Mentioned recently.)

Chattanooga, Tenn.—Apartment-house.—George W. Wallace will erect brick apartment-house and storeroom building to cost \$11,000.

Chattanooga, Tenn.—Residence.—T. S. Wilson will erect brick residence to cost \$10,000.

Chattanooga, Tenn.—Dormitory.—George Lurch has contract to erect dormitory at the McCallie School to replace burned structure; pressed brick; stone trimmings; slate roof; steam heat; hot and cold baths; cost between \$12,000 and \$15,000. Dan Reamer has prepared plans.

Chattanooga, Tenn.—Clubhouse.—Country Club has awarded contract to George Buckley for erection of building; frame; two stories with basement; 40x100 feet; 15-foot veranda around entire structure; exterior finishings of rough stained timber with red tile roof; cold-storage and ware rooms; shower baths, dressing and locker rooms in basement; glass conservatory; hardwood finishings throughout interior; cost \$10,000. Foundation of sandstone, which was let under separate contract, has been completed. Bearden & Foreman prepared plans and specifications.

Columbia, Mo.—Buildings.—Reported that Louis C. Stephens, St. Louis, Mo., will prepare plans and specifications for conservatory of music and gymnasium to be erected at Stephens College.

Columbia, S. C.—Building.—Perry Electric Co. will erect brick building, probably two stories high and 19½ feet wide.

Columbia, S. C.—Store Building.—Hamby & Hamby, 412 National Loan and Exchange Bank, will prepare plans for remodeling of store of James L. Tapp Company.

Columbia, S. C.—Residence.—Lewis W. Haskell will erect residence, for which plans will be prepared by Hamby & Hamby, 412 National Loan and Exchange Bank.

Columbia, S. C.—Residence.—Hamby & Hamby, 412 National Loan and Exchange Bank, have contract to prepare plans for residence for B. Lucas Webb.

Corsicana, Texas.—School Building.—City has voted affirmatively the issuance of \$15,000 of bonds to purchase school property. Special tax levy for purchase of park was defeated. Address The Mayor.

Covington, La.—Store and Office Building.—Louis Wehrli has had plans prepared by Percy S. Barelli for erection of store and office building; two stories; fireproof; concrete blocks; 60x65 feet.

Covington, Tenn.—Warehouse.—Tipton County Warehouse Association incorporated with \$10,000 capital stock by J. T. Rose, W. E. Gwinn, L. J. Fought and others to build cotton warehouse at Covington, Atoka, Tenn., and other cities in Tipton county.

Dallas, Texas.—Business Building.—C. Meislerhans will erect business building with residence flats; brick; probably two stories; cost \$6400; Wm. Martens, architect; Thomas & Hill, contractors.

Dallas, Texas.—Residence.—Mrs. Julia McConnell will erect brick-veneer residence; two stories; 10 rooms; cost \$5000; Overbeck & Co., architects; Haney & Walton, contractors.

Dallas, Texas.—Residence.—S. D. Murray will erect two-story frame residence to cost \$7000; C. W. Bulger & Son, architects; S. E. Edman, contractor.

Dallas, Texas.—Hotel.—Southern Hotel & Realty Co. incorporated with \$6000 capital stock by J. P. Blake, J. T. Elliott and E. E. King.

Dallas, Texas.—Church.—C. W. Bulger & Son are preparing plans for improvement and enlargement of First Baptist Church, to cost \$60,000, as was recently noted; addition to be of brick, with hot-water heating and gas and electric lighting; M. H. Wolfe, chairman building committee.

Dallas, Texas.—Business Building.—Carl Johnson will erect two-story brick building to cost \$7000.

Dallas, Texas.—Office Building.—Texas Land & Mortgage Co. will add a second story to one-story portion of building at a cost of \$7000.

Dawson, Ga.—Passenger Station.—Bartlett & Grainger, contractors, are reported as having commenced work on proposed new passenger station of the Central of Georgia Railway.

Denison, Texas.—Office Building.—Reported that St. Louis capitalists, who recently purchased the Empire Building, will remodel structure as office building and install electric elevator; cost \$100,000; C. E. Hanon, resident manager.

Dubach, La.—Cotton-yard and Warehouse. Dubach District Union Cotton-Yard & Warehouse Co. incorporated with \$5000 capital stock by S. S. Tatum, L. G. Bareff, J. P. Jones and others.

Elizabethton, Tenn.—Office and Store Building.—R. A. Long will erect office and store building 100x100 feet; two stories high; press-brick fronts; stone trimmings; galvanized-iron cornice; galvanized-iron roof; steel ceilings; structural-iron work; plate and prism glass; plumbing and steam heat; cost \$14,000; architects, Burnett & Kearfott of Bristol, Tenn.-Va.

Elizabethton, Tenn.—Office and Store Building.—Burnett & Kearfott of Bristol, Tenn.-Va., are architects for hardware store and postoffice building for the Barnes-Boring Hardware Co.; building to be 70x110 feet; two stories; press-brick fronts; galvanized-iron cornice; galvanized-iron roofing; plate and prism glass; vaults and vault doors.

Elkins, W. Va.—School Buildings.—City will vote June 15 on the issuance of bonds to erect two school buildings costing \$30,000 each. Address The Mayor.

El Reno, O. T.—Roundhouse.—Chicago, Rock Island & Pacific Railway has awarded contract to Collins Bros. for construction of proposed roundhouse.

El Reno, O. T.—City Hall.—City is considering the erection of City Hall to cost about \$50,000. Address The Mayor.

Ensley, Ala.—School Building.—City has voted affirmatively the issuance of \$35,000 of bonds to erect school building. (Referred to April 11.) Address The Mayor.

Ensley, Ala.—School Building.—Board of Education has authorized the purchase of site, 150x200 feet, in Tuxedo on which to erect fifth ward school building. H. D. Breeding, Birmingham, Ala., will prepare plans and specifications, and it is understood that the cost of structure will be about \$20,000. (Referred to April 11.)

Eufaula, I. T.—School Building.—City has voted affirmatively the issuance of \$15,000 of bonds for erecting school building; referred to April 11; J. W. Thornton, secretary Chamber of Commerce.

Fort Sam Houston, Texas—Buildings.—Plans have been completed for about 90 new buildings to be erected in the new post addition, and bids, to be opened not later than June 1, will soon be advertised for. Capt. L. J. Fleming will supervise construction work.

Fort Sam Houston, Texas—Building.—Sealed proposals in triplicate will be received at office of Constructing Quartermaster, Fort Sam Houston, until June 13 for construction, plumbing and electric wiring of one set hospital sergeant's quarters; United States reserves usual rights. Plans and specifications may be seen at above office. Sealed envelopes containing proposals should be marked "Proposals for Hospital Sergeant's Quarters" and addressed to L. J. Fleming, Constructing Quartermaster.*

Fort Screven, Ga.—Buildings.—Grant Wilkins, Atlanta, Ga., has contract at \$34,630 to erect six buildings for the torpedo station. Plans of steel wharf to be built at the fort have been approved and Colonel Kingman will advertise for bids.

Fort Smith, Ark.—Office Building.—Allan Kennedy is having plans prepared by W. H. Blakely for erection of office building 151x30 feet; four stories; gray brick and stone; elevator.

Fort Worth, Texas—Warehouse.—C. T. Hodge will erect warehouse, 50x100 feet; five stories and nine-foot basement; mill construction; load limit 700 pounds square foot; electric lighting; direct-connected electric elevators; cost \$20,000; architect, M. L. Waller; contractor, J. Morgan Davis. (Mentioned recently.)

Fort Worth, Texas—Office Building.—Dr. W. R. Thompson has purchased site 70x50 feet at \$20,000, on which to erect office building; two stories; brick and steel construction.

Fort Worth, Texas—Hotel and Office Building. Winfield Scott will erect four-story hotel and office building 75x140 feet.

Frederick, O. T.—School Building.—City will probably vote on the issuance of bonds to erect school building at a cost of about \$25,000. Address The Mayor.

Galveston, Texas—Store Building.—W. J. Hughes will erect two-story brick store building.

Gatesville, Texas—School Building.—City will erect school building; 12 rooms; two stories and basement; brick construction; heating plant, kind not decided; electric-lighting fixtures; cost \$25,000 to \$30,000; architect, T. Brooks Pierson of Waco, Texas; contractor not yet engaged and date of bids not decided. Address Davis R. Hall, Mayor.

(Lately noted city as voting bonds for erection of school building.)*

Georgetown, S. C.—Residence.—Herman Schenk will erect residence, for which plans will be prepared by Hamby & Hamby, 412 National Loan and Exchange Bank, Columbia, S. C.

Georgetown, S. C.—Courthouse.—Plans prepared by Hamby & Hamby, 412 National Loan and Exchange Bank, Columbia, S. C., for erection of courthouse annex; reinforced concrete construction; electric lights; plumbing; fireproof doors and shutters; tile roof; steam heat; cost \$10,000; secretary Courthouse Annex Commission, H. W. Fraser. (Mentioned in April.)

Georgetown, S. C.—Residence.—L. S. Ehrlich will build residence to cost \$10,000; colonial style. Plans are being prepared by Hamby & Hamby, 412 National Loan and Exchange Bank, Columbia, S. C.

Glard, Ala.—School Building.—C. T. Gifford, I. I. Moses and J. B. Everidge have been appointed by School Board to have plans prepared for erection of school building. Bond issue of \$10,000 has been voted.

Graford, Texas—Bank Building.—Bids will be received on bank building, 25x30 feet, stone rubbed and ashlar half and half; quarry near ground; usual rights reserved. Plans and specifications can be seen at office of Taylor & Mount, architects, Mineral Wells, Texas.

Greensboro, N. C.—School Building.—J. Webb Bain has contract to erect graded-school building; three stories; brick; 12 rooms; cost \$20,000. Plans have been prepared by W. L. Brewer. (Referred to May 2.)

Greensboro, N. C.—School Building.—Sealed proposals will be received by J. I. Foust, dean, for completing students' building and also for extending the south wing of the Spencer dormitory at the North Carolina State Normal and Industrial College, until May 27. Plans and specifications may be seen at office of the dean at college, at office of Superintendent of Public Instruction, Raleigh, N. C., and office of Hook & Rogers, architects, Charlotte, N. C. Proposals are to be made out in three forms, as follows: First, proposals for completing students' building; second, proposal for building wing to Spencer Building, and third, combined proposal to complete both as one contract. Certified check of \$500 made payable to the dean must accompany the group of bids. Bond in sum of one-half of amount of contract (from reputable surety company) must be furnished by successful contractor; buildings to be completed by September 1; usual rights reserved.

Hamilton, Texas—Warehouse.—Hamilton Warehouse Co. incorporated with \$3000 capital stock by J. H. Sampson, J. Allen Kyle and W. A. Stevens.

Hattiesburg, Miss.—Store Building.—C. M. Rubush, Meridian, Miss., has been awarded contract for store building to be erected for E. L. Robins, R. N. Collins and M. D. King. Building will be 60x88 feet; one story; brick; ordinary construction; electric lighting; cost \$3500.

Hickory, N. C.—Church.—Corinth Reformed Church, J. I. Murphy, pastor, will probably expend about \$20,000 for erection of building recently mentioned; plans not yet made. G. H. Gutner is secretary building committee.

Hinton, W. Va.—Opera-house and Lodge Building.—Contract has been let to Alleghany Construction Co., Clifton Forge, Va., for erection of opera-house and lodge building; owner, Hinton Masonic Development Co.; architects, Rabenstein & Warne, Charleston, W. Va. Building to be 70x140 feet; corner; front and one side pressed brick; practically fireproof; steam heating; electric lighting; cost \$60,000; building to contain opera-house, lodgerooms and two store-rooms.*

Honea Path, S. C.—Library.—Bids will be received until June 1 by P. W. Sullivan, secretary, for furnishing all material and erecting Carnegie Library building. Plans and specifications may be seen at office of architect, Jos. H. Casey, Anderson, S. C.; usual rights reserved; John B. Humbert, chairman building committee.

Houston, Texas—Hospital.—Physicians & Surgeons' Hospital Co. incorporated with \$25,000 capital stock by Drs. J. H. Sampson, J. Allen Kyle and W. A. Stevens. It will erect hospital either of brick or concrete and probably three stories high.

Jackson, Miss.—Fire Stations.—City will erect two fire stations after sale of bonds on June 4. Stations will be two-story brick structures, fireproof, with electric lighting; cost \$5000 each; Ramsey W. Norton, Mayor. (Mentioned May 16.)

Jackson, Miss.—School.—Plans for school to be erected after sale of bonds on June 4 calls for two-story and basement building,

fireproof, with steam heat and electric lighting; cost \$10,000; Mayor, Ramsey W. Norton. (Mentioned May 16.)

Jackson, Miss.—Hotel.—S. T. Carnes, Memphis, Tenn., is reported as having made arrangements to rebuild the burned Norville Hotel. Plans will probably be prepared by R. H. Hunt, Chattanooga, Tenn.

Kansas City, Mo.—Pavilion.—J. B. Newel has contract at \$27,239 to erect music pavilion.

Kansas City, Mo.—Warehouse.—Advance Threshing Machine Co. will erect warehouse; five stories, 100x30 feet; cost \$65,000.

Kansas City, Mo.—Residences.—E. Dickinson states that report of intended erection of residences to cost \$60,000 is premature. (Mentioned May 16.)

Kansas City, Mo.—Office Building.—United States & Mexican Trust Co. has permit to erect four-story office building on site 140x58 feet, costing about \$125,000.

Kansas City, Mo.—Building.—W. H. Maxwell, chairman board of directors, has secured permit to erect labor temple; four stories; 110 feet frontage; cost \$80,000.

Kittmillerville, Md.—Bank Building.—First National Bank will erect building; E. J. Hamill, cashier.

Knoxville, Tenn.—Residence.—Hu. L. McClung will erect frame residence to cost \$8500.

Lafayette, La.—Cotton Warehouse.—J. W. Boyette, Winnfield, La., and R. Mills, Sunset, La., are promoting the erection of cotton-storage warehouse.

Lake Providence, La.—School Building.—Albert G. Simms, Little Rock, Ark., has contract to erect high-school building at \$33,000 after plans by Gibbs & Sanders, Little Rock, Ark. (Referred to April 25.)

Lancaster, S. C.—Bank and Theater Building.—Dr. J. F. Mackey will erect two-story brick building, 100x50 feet. Contract has been awarded to Mr. McA. McManus, Columbia, S. C.

Laredo, Texas—Courthouse.—Plans by Alfred Giles, San Antonio, Texas, have been accepted for erection of courthouse for Gilles county, and bids will soon be advertised for.

Leesville, La.—Bank Building.—Building recently noted to be built by Bank of Leesville will be of brick and concrete construction; two stories; partially fireproof; electric lighting; probably steam heat; architect, Mr. Steinman, Beaumont, Texas.*

Lexington, Ky.—Hotel.—Richards, McCarty & Bulford, Columbus, Ohio, have prepared plans and will receive bids until June 11 for erection of proposed hotel for the Phoenix Hotel Co.

Lexington, Ky.—Residence.—Foster Helm has purchased 218 acres of land at \$19,050, and will erect residence.

Lexington, Ky.—Science Building.—Frank Corbin has contract to erect proposed Carnegie science building at the Kentucky University, plans for which have been prepared by Richards, McCarty & Bulford, Columbus, Ohio; three stories with ground floor and basement; foundation walls 60x90 feet; buff Bedford stone and Lexington brick; maple flooring; oak and other hardwood finishings; cost about \$50,000; James M. Graves, chairman building committee. (Referred to March 28.)

Little Rock, Ark.—Office Building.—George R. Mann is preparing plans for office building (recently mentioned) to be erected for H. A. Bowman. Additional facts: Building will be fireproof, having hot-water heating, electric and gas lighting and electric elevators; cost \$125,000; contract not yet let. Address H. A. Bowman, 111 West 6th street.

Little Rock, Ark.—Office Building.—Sealed bids will be received by John S. Braddock until June 3 for erection of three-story granite fireproof office building. Plans may be obtained at office of Charles L. Thompson, architect, 111 Fulk Building, Little Rock. Separate bids will be received for plumbing, heating and wiring or bids may also be submitted including all the items; usual rights reserved.

Live Oak, Fla.—Store Building.—McCullers Bros. will erect store building on lot 40x100 feet.*

Louisville, Ky.—Church.—Highland Presbyterian Church, Rev. T. M. Hawes, pastor, has had plans prepared by Hawes & Hutchings for enlargement of edifice to cost \$12,000.

Louisville, Ky.—Apartment-house.—John B. and Mary E. Klorer have purchased site, 33x130 feet, on which to erect apartment-house to cost \$6000.

Louisville, Ky.—Residence.—John Keller will erect three-story brick dwelling at a cost of \$6000.

Louisville, Ky.—Apartment-houses.—William J. Jacobs will erect two three-story

brick apartment-houses, aggregate cost being \$30,000.

Lumberton, N. C.—School Building.—City has voted affirmatively the issuance of \$35,000 of bonds for erection of graded-school building. Address The Mayor.

Lumberton, N. C.—Courthouse.—Commissioners of Robeson county have selected Frank P. Milburn & Co., Washington, D. C., to prepare plans and specifications for \$50,000 county courthouse. Bids will be called for when plans are ready.

Memphis, Tenn.—Dwelling.—J. R. Williams will erect residence; two stories; brick veneer; nine rooms; cost \$6000; James Hutchinson, contractor.

Macon, Ga.—Hotel.—Highlands Company incorporated with a probable capital stock of \$120,000 to erect proposed tourist hotel by John T. Moore, Jordan Mawsee, Henry Horne, T. J. Carling and Willis B. Sparks. It has purchased a 420-acre tract of land on which to erect building, plans for which have been prepared by Frank R. Hupp. Bids have been received and conditionally accepted; Mr. Smalling lowest bidder for erection of structure at \$59,000; heating and plumbing will cost \$18,000; B. Altman & Co., New York, N. Y., have bid on furnishing interior at \$29,000, and a firm of landscape engineers have bid on grounds at \$10,000.

Marion, Ala.—Library.—Judson College has had plans prepared for erection of library to cost \$30,000.

Marksville, La.—High-school Building.—C. H. Page, Austin, Texas, has contract to erect high-school building to cost \$30,000.

Martinsburg, W. Va.—School Building.—City will vote May 27 on the issuance of \$50,000 of bonds to erect additional school buildings. Address The Mayor.

Matoaka, W. Va.—Business Building.—Wm. Seny & Son, Bluefield, W. Va., have been awarded contract for business building to be erected by W. W. Harlow; building to be of veneered brick, 50x60 feet; cost \$7000 to \$8000. (Recently mentioned.)

Memphis, Tenn.—Apartment-house.—J. T. Fargason will remodel apartment-house, erecting two-story addition, providing 20 additional rooms; cost \$7000; Olsen & Lesh, contractors.

Memphis, Tenn.—Dwelling.—J. S. Horn will erect residence; two stories; stone veneer; cost \$7000; James Hutchinson, contractor.

Memphis, Tenn.—Bank and Office Building.—Fred Young has contract to erect proposed bank and office building for the North Memphis Savings Bank; seven stories; stone, brick and terra-cotta; electric steel elevators; cost \$100,000. (Referred to January 31.)

Norfolk, Va.—Hospital.—Norfolk Protestant Hospital is building new wing at cost of \$25,000; size 100x43 feet; ordinary construction; steam heating; electric lighting; architects, Taylor & Hephurn; contractors, Belts-Hayden Company.

Memphis, Tenn.—Residence.—R. Overby will erect two-story brick-veneer eight-room residence to cost \$6000.

Memphis, Tenn.—Dwelling.—E. E. Whitner will erect two-story stone-veneered eight-room dwelling to cost \$5000.

Memphis, Tenn.—Store Building.—P. F. Lundo will erect store building; two stories; frame; 10 rooms; gravel roof; cost \$5000.

Meridian, Miss.—Church.—West End Presbyterian Church will erect edifice. Address The Pastor.

Mobile, Ala.—Warehouse.—Stone Bros., architects, New Orleans, La., have awarded contract to Jett Bros. for erection of warehouse for the Dumas Grocery Co. Structure will be two stories high; brick; semireproof; 60x224 feet; cost \$25,000.

Mobile, Ala.—Church.—G. A. Chamblin has contract to erect \$50,000 brick edifice for St. Joseph's Church after plans by Diboll & Owen, New Orleans, La.; Rev. Father Murphy, pastor.

Mt. Vernon, Ky.—Spoke Manufacturing.—Rockcastle Spoke Co. incorporated with \$7500 capital stock.

Moundsville, W. Va.—Building.—Mound City Bank is having plans prepared for erection of building; site 80x105 feet; three stories; pressed brick or concrete blocks; contain banking, store and office rooms and theater; cost \$50,000.

Nashville, Tenn.—Hospital.—Central Tennessee Hospital for the Insane has approved plans for erection of addition to cost \$60,000. Structure will be four stories high, constructed of brick, and will accommodate 150 patients.

Nashville, Tenn.—Residence.—D. Lowenhelm will erect residence in the new Richland addition; two stories; 11 rooms; brick; stone trimmings; shingle roof; laundry.

Plans have been prepared by Thompson, Asmus & Norton and bids will soon be received.

Nashville, Tenn.—Hotel.—Board of Trade, Samuel G. Douglas, president, proposes the organization of company to build hotel costing \$1,000,000 with furnishings. Meeting will be called to formulate specific plans.

Natchitoches, La.—Cotton Warehouse.—Farmers' Union is considering the erection of cotton warehouse; L. N. Holmes, State president.

Newberry, Fla.—Business Building.—John G. White will erect fireproof building; architect desired.

New Iberia, La.—Opera-house.—Local Lodge B. P. O. Elks has awarded contract to Eugene Guillott at \$25,500 for erection of opera-house after plans by Stone Bros., Hibernia Bank Building, New Orleans, La. (Referred to May 9.)

New Orleans, La.—Wharf.—Dock Board has awarded contract to W. T. Cary & Bro. for construction of proposed St. Andrew street wharf. Structure will be 1650 feet long and cost about \$108,000.

New Orleans, La.—City Hall.—New city hall building, recently mentioned as contracted to Congress Construction Co., 1009 Hartford Building, Chicago, Ill., will be built at cost of \$250,000; size 90x112 feet; six stories; terra-cotta and press brick exterior; steel frame; concrete and tile fireproofing; low-pressure vacuum system heating; electric lighting; electric passenger elevator; architects, Diboll & Owen.*

New Smyrna, Fla.—Temple.—Masonic Order, A. C. McCall, W. M., is having plans prepared by Talley & Gassner, Jacksonville, Fla., for temple; three stories, 50x80 feet; sand-lime brick and artificial stone; cost \$12,000. Bids will be received until June 3.

Northfork, W. Va.—Church Building.—Church board has let contract for erection of church building to William Rossi; building to be of brick; 40x60 feet; cost \$3000; architect, T. A. Smith, Bramwell, W. Va.

Oakland, Md.—Courthouse.—Commissioners of Garrett County have awarded contract for erection of courthouse (recently mentioned) to W. A. Liller, Keyser, W. Va.; plans were prepared by J. R. Gordon, 244 Fifth avenue, New York, N. Y.; building will be three stories and basement; stone and brick; 100x120 feet; fireproof vaults, marble floors, etc.; partly fireproof; steam heating; electric and gas lighting; cost \$75,000; work to be completed in one year.*

Oklahoma City, O. T.—Office Building.—Robert Galbreath of Tulsa, I. T., and others have purchased site at \$102,500 on which to erect eight-story steel and concrete office building 150x140 feet. It is estimated that cost will be between \$250,000 and \$300,000.

Oklahoma City, O. T.—Railway Terminal Buildings.—Oklahoma City Electric Railway Terminal Association, recently incorporated by Guy McClure, Warren E. Moore and others, will expend about \$1,000,000 in construction of interurban electric and street-railway terminals, terminal station and office building, the latter to be 75x150 feet and probably eight stories high. Train sheds with steel skeletons and glass roofs will also be erected.

Owensboro, Ky.—Church.—Methodist Church will erect edifice after plans by C. W. Kimberlin. Ed S. Killman, A. G. May and others compose committee.

Owings Mills, Md.—Residence.—Louis M. Vordenberge has had plans prepared by Henry J. Tinley, Hoffman Building, 11 East Lexington street, Baltimore, Md., for erection of 2½-story dwelling. Bids are now being received.

Paducah, Ky.—Apartments.—Jack Cole has contract for erection of apartment building to be erected for Mrs. H. G. Tandy and Mrs. Ed P. Noble; plans by A. L. Lassiter; size 52½x66 feet; brick; two stories; four apartments; ordinary construction; steam heating; electric lighting; cost \$3000. (Recently mentioned.)

Paducah, Ky.—Lodge Building.—Odd Fellows' Building Association is having plans prepared by A. L. Lassiter, Gelsner Building, for remodeling of Longfellow school building, recently purchased; completed building will be two stories and basement; brick; 78x95 feet; possibly steam heat and combination lighting; cost of building and remodeling, \$30,000. Address Odd Fellows' Building Association, 3 Links Building, corner 5th street and Kentucky avenue.

Paris, Texas—Union Depot.—Reported that the Gulf, Colorado & Santa Fe Railway and the St. Louis & San Francisco Railroad have had plans prepared for erection of union passenger station; two stories; brick; 195x42 feet; waiting-room for whites, 54 feet long; C. F. W. Felt, Galveston, Texas, chief

engineer of former company, and J. F. Hinckley, St. Louis, Mo., chief engineer of latter.

Paris, Ky.—School Building.—Sealed bids will be received by Board of Education until May 27 for erection and completion of school building in accordance with plans and specifications by H. L. Rowe, Lexington, Ky., which can be seen at his office or at Council Chamber, City Hall, Paris. Bids must be accompanied by certified check, equal to 5 per cent. of contract price, payable to D. P. Dow, president of Board of Education. Separate bids for different departments of work will be asked for. Bids to be delivered, sealed, to E. H. Owens, clerk of Board of Education, and endorsed "Proposals for Public School;" usual rights reserved.

Parkersburg, W. Va.—Lodge Building.—Lodge No. 7, I. O. O. F., is having plans prepared by R. H. Adair for lodge building; six stories, 51x110 feet; press brick and stone; slag roof; gas and electric fixtures; cost \$50,000. Bids will be received by building committee until June 1.

Plainview, Texas.—Bank Building.—Bids will be received until May 28 for erection of two-story brick and stone trimmed building, 100x120 feet, for the Plainview Bank & Trust Co. and Harp and Wilkin. Plans are now on file at Gaston National Bank of Dallas, Texas, where bids will be received.

Port Arthur, Texas.—School Building.—City will vote on the issuance of \$10,000 of bonds to erect school building at Stilwell Heights. Address The Mayor.

Pulaski, Tenn.—Courthouse.—New courthouse to be erected by Giles county will be of brick construction; three stories; fireproof; steam heat; electric lighting; cost approximately \$40,000; architect not secured; W. P. Hart, secretary Board of Commissioners. (Mentioned recently.)

Raleigh, N. C.—Hospital.—Special Hospital Commission, of which Dr. J. W. McNeill is a member, has decided to expend between \$300,000 and \$300,000 for erection of hospital buildings for epileptics. It is proposed to install plant for manufacturing brick for the structure. It has been previously decided to expend \$15,000 in improvements at Goldsboro, N. C., and \$5000 for additional land at Morgantown, N. C.

Richlands, Va.—Bank Building.—Merchants and Farmers' Bank will erect bank building; two stories, 26x42 feet; brick and stone; slate roof; hot-water heat; electric lighting; cost \$7500; contractors, Witt Bros., Bramwell, W. Va.; architects, Holmboe & Laferty, Bluefield, W. Va.

Richmond, Va.—Church.—Moore Street Baptist Church has had plans prepared by Noland & Baskerville for erection of edifice to cost \$30,000; R. O. Johnson, pastor.

Richmond, Va.—Alms-house.—Roney & Atkinson have contract at \$52,188 for erection of proposed almshouse for negroes after plans by Charles K. Bryant, 1014 East Main street, Richmond. (Recently mentioned.)

Richmond, Texas—Courthouse.—Fort Bend county will vote July 25 on the issuance of \$75,000 for erecting courthouse. Address County Commissioners.

Ridgedale, Tenn.—High-school Building.—T. S. Moudy has contract to erect high-school building according to original plans prepared by Adams & Alsop, Chamberlain Building, Chattanooga, Tenn.; cost \$46,000. (Referred to April 18.)

Robert Lee, Texas—Building.—S. C. Wilkins has contract to erect Odd Fellows' Hall; to be constructed of concrete blocks and cost \$5000.

Ryan, I. T.—Bank Building.—First National Bank will erect two-story bank and office building, 25x86 feet; cost \$3000; gas lighting; to be completed September 1.

Ryan, I. T.—Hotel.—John R. Ralls, president of stock company, will erect two-story brick hotel 44x100 feet; cost about \$10,000; gas lighting; to be completed August 1.

Salisbury, N. C.—Church.—Frank P. Milburn & Co., Washington, D. C., have been selected to prepare plans for remodeling Episcopal church.

Salisbury, N. C.—Residence.—R. V. Brawley is having plans and specifications for residence prepared by Frank P. Milburn & Co., Washington, D. C.

San Antonio, Texas—Office Building.—Hicks Building Co. incorporated with \$12,000 capital stock to erect office building by Marshall Hicks, Anne Hicks, F. H. Hicks and Yale Hicks.

San Antonio, Texas—Passenger Station.—Reported that the International & Great Northern Railroad will soon submit plans to contractors for erection of proposed passenger station to cost about \$150,000; O. H. Crittenden, resident engineer, Palestine, Texas.

San Antonio, Texas—Church.—Sherman Street Church will erect edifice after plans by W. N. Hagy; Rev. Arthur C. Bell, pastor.

San Antonio, Texas—School Buildings.—City has voted affirmatively the issuance of \$200,000 of bonds for school purposes. Address The Mayor.

Sedalla, Mo.—Barns.—Sealed proposals will be received for erection of three brick stock barns on Missouri State Fair grounds, near Sedalla. Plans and specifications may be seen at office of T. W. Bast, architect, Sedalla. Each bid must be accompanied by certified check payable to J. R. Rippey, secretary, as guarantee that contractor will furnish satisfactory bond within five days after contract is awarded. The certified check must be for amount equal to 3 per cent. of contract price. The directors will meet in Kansas City, Mo., at Midland Hotel, June 5, and all bids must be filed with secretary before 9 A. M. on above date; J. R. Rippey, secretary.

Selma, Ala.—Clubhouse.—Harmony Club has purchased site 50x110 feet on which to erect building; three stories; white stone and white tiling bricks; cost \$30,000. B. J. Schuster, M. J. Meyer and others compose building committee.

Sherman, Texas—Union Depot.—It is reported that the Texas & Pacific Railway and other railways entering Sherman are considering the erection of union passenger station; L. S. Thorne, Dallas, Texas, vice-president and general manager.

Sherwood, Md.—Warehouse.—Sherwood Distilling Co. has awarded contract to Jacob Peters, Highlandtown (P. O. Baltimore), Md., for erection of warehouse 142x92 feet; four stories; capacity 15,360 barrels; cost \$18,000.

Shreveport, La.—City Hall.—Sealed proposals will be received by C. G. Rives, City Comptroller, until June 11 for furnishing labor and material necessary to build city hall in accordance with plans and specifications as prepared by L. S. Green, Houston, Texas. Each bid must be accompanied by certified check for \$3000, made payable to the City Comptroller. Plans can be seen at office L. S. Green, 233 and 234 Commercial National Bank Building, Houston, and at office of City Comptroller. Architect will upon request, accompanied by \$25, send those desiring an extra set of plans and specifications, \$10 to be refunded when plans and specifications are returned; usual rights reserved.

Slidell, La.—School Building.—Board of School Trustees will receive bids until June 20 for furnishing materials and completing high-school building in accordance with plans and specifications prepared by Andrew J. Bryan, 708 Hennen Building, New Orleans, La. Bids must be addressed, in sealed envelope, to W. A. Martin, chairman, and must be accompanied by certified check of \$300. Plans and specifications can be secured from architect by depositing \$25, \$15 to be refunded when plans are returned; usual rights reserved.

Soddy, Tenn.—High-school Building.—Sealed bids will be received until June 1 for erection of high-school building according to plans and specifications prepared by D. A. Reamer, and which may be examined at his office, First National Bank Building, Chattanooga, Tenn. Certified check must accompany each bid and successful bidder will be required to give bonds as specified in specifications. Usual rights reserved. Bids should be marked plainly on outside, "Contractor's Bid," and addressed to County Board of Education, Courthouse, Chattanooga, Tenn.; W. B. Garvin, chairman.

Sparks, Ga.—Hotel.—Sparks Hotel Co. incorporated with \$15,000 capital stock to build three-story brick-and-stone hotel.

Spartanburg, S. C.—Hospital.—Dr. F. L. Potts will erect hospital to cost between \$12,000 and \$15,000.

St. Augustine, Fla.—Building.—Realty & Theater Co. will erect opera-house, business and office building.

St. Charles, Mo.—Dormitory.—Bids have been received for erection of dormitory building 84x140 feet for The Lindenwoods, after plans by Mariner & LeBeaume, St. Louis, Mo.; cost \$40,000.

St. Georges, S. C.—School Building.—School trustees will erect high-school building for which bonds were recently reported voted; ordinary construction; brick; plans and specifications of buildings desired; cost \$5000 to \$10,000; bids to be opened May 24. Address M. S. Connor, secretary Board of Trustees.*

St. Louis, Mo.—Church.—Hope Congregation Church has purchased site 90x170 feet on which to erect edifice. Address The Pastor.

St. Louis, Mo.—Misval Realty Co. has purchased site 60x60 feet on which to erect seven-story and basement building, after

plans by Mauran, Russell & Garden. Address company, care of the Mississippi Valley Trust Co.

St. Louis, Mo.—Opera-house.—George H. Johnston Realty & Construction Co., St. Louis, Mo., is preparing plans for three-story opera-house to cost about \$75,000.

St. Louis, Mo.—Depot.—Columbia Transfer Co. has purchased site 152x100 feet on which to erect depot; Mississippi Valley Trust Co. will be in charge of construction work.

St. Louis, Mo.—Apartment Buildings.—Paul J. Bierman will erect two apartment buildings; architect and contractor, Thomas L. Houser, 5903 Columbia avenue; buildings each 33.6x53 feet; two-story; four compartments; three-room flat; ordinary construction; gas lighting; cost \$13,000; owners address, 2708a, Arkansas avenue.

St. Louis, Mo.—Office Building.—Vendome Investment Co., J. D. Walter, president, has leased site 85x63 feet on which to erect 18 or 19 story office building.

St. Matthews, S. C.—School Building.—Hamby & Hamby, 412 National Loan & Exchange Bank, Columbia, S. C., will prepare plans for school building recently mentioned; ordinary brick construction; cost \$10,000; J. H. Loryea, secretary.

St. Petersburg, Fla.—Business Building.—A. M. Gallaher, Palace Ice Cream Parlor, will erect two-story brick building.

Sulphur, I. T.—Church.—Bids will be received by building committee, First M. E. Church, South, until May 26 for erection of brick edifice. Will receive bids on brick-work alone or on both brick and wood; contractor to furnish all material; usual rights reserved; J. M. Webster, chairman building committee.

Sulphur Springs, Texas—School Building.—Plans have been adopted for erecting proposed high-school building to cost \$20,000 and three ward school buildings to cost \$10,000 each. (Bond issue of \$50,000 was reported May 9 as having been voted affirmatively.) Address The Mayor.

Summerton, S. C.—Church.—Sealed proposals will be received until June 3 for erecting and completing Summerton M. E. Church. Plans and specifications are on file at office of Chas. C. Wilson, architect, Columbia, S. C., and at office of Edward S. Jones, pastor.

Tampa, Fla.—Garage.—J. C. Blackburn will erect garage for J. L. Tallevast; one story, 12x105 feet; brick; cost \$5200.

Tampa, Fla.—Business Building.—A. J. Knight has authorized Shaw & Jay to proceed with plans for brick building to cost \$60,000.

Tampa, Fla.—School Building.—Heater & Walker have secured permit to erect addition to the Michigan avenue school; two stories, 39x118 feet; brick; basement equipped with laboratories; cost \$20,000. Shaw & Jay architects, will supervise construction work.

Tampa, Fla.—Business Building.—J. C. McNeill has contract to erect one-story brick addition to business building of Williams & Moorhouse to cost \$7500.

Tampa, Fla.—Business Building.—Ireland & Walker have contract at \$25,000 for erection of three-story brick building for Mrs. Guterrez.

Tampa, Fla.—Building.—Sanchez & Haya Real Estate Co. has awarded contract to the Tampa-Havana Lumber Co. for erection of building; three stories; brick; 53x70 feet; cost \$11,000; Shaw & Jay prepared plans.

Tampa, Fla.—Business Building.—Harry G. Warner has awarded contract to Levick & Mobley for erection of business building; 75x105 feet; three stories; brick and stone; cost \$40,000.

Tampa, Fla.—Churches.—Fred J. James, Drew Building, West Tampa, is making plans for the erection of two churches—one for Presbyterian congregation, to cost \$20,000; another for Methodist congregation, to cost \$18,000.

Teague, Texas—Bank Building.—First State Bank of Teague will erect bank building; Tait & Co. and others incorporators.

Temple, Texas—Cotton Warehouse.—Holland District Union of the Farmers' Union of Bell County, J. M. Markham, president, has organized company with \$3000 capital stock to build cotton warehouse; application will be made for charter.

Temple, Texas—Residence.—F. P. Hamill, Mayor, has awarded contract for erection of residence to cost \$10,000.

Towson, Md.—Residence.—William M. Ives, 1021 Guilford avenue, has had plans prepared by J. E. Laferty, 11 East Pleasant street, Baltimore, Md., for erection of two-and-one-half-story residence. Bids are now being received.

Towson, Md.—Home.—Wyatt & Nolting, architects, Keyser Building, Baltimore, are

preparing plans for proposed improvements to the home of the Maryland Hospital for Consumptives. A large addition will be erected to main building, to be one story high and contain kitchen and dining-room; one-story infirmary building to accommodate 15 patients, amusement pavilion, etc.

Towson, Md.—Parsonage.—Catholic Church of the Immaculate has had plans prepared for erection of parish-house to cost \$10,000. Address The Pastor.

Tunnelton, W. Va.—Bank Building.—It is reported that A. J. Bonafeld is having plans prepared by John C. Tibbets for stone and brick banking and business building.

Tuscaloosa, Ala.—Courthouse.—Commissioners of Tuscaloosa County have awarded contract to Carrigan & Lynn, Birmingham, Ala., at \$80,397 for erection of courthouse. Contract for plumbing and steamfitting was awarded to Daniel Bros. of Tuscaloosa. (Referred to April 18.)

Tuscumbia, Ala.—Jail Building.—Commissioners of Colbert County will erect jail building and have authorized Probate Judge Simpson, chairman, to advertise for plans and specifications. Structure will be of stone, brick or concrete, and cost about \$30,000.

Uvalde, Texas.—School Building.—City has voted affirmatively the issuance of \$40,000 of bonds to erect school building. Address The Mayor.

Victoria, Texas.—Hotel.—B. H. Matthews, Denver, Col., has awarded contract for erection of addition to hotel; 22 rooms; two stories; concrete blocks.

Washington, D. C.—Exchange Building.—Major J. T. Crabbs, constructing quartermaster, Army General Hospital, Takoma Substation, Washington, D. C., will receive proposals until May 31 for foundation work and superstructure, separately, including plumbing, heating and wiring for electric lighting of post exchange building at Washington Barracks, D. C. A deposit of \$25 required for drawings and specifications; all rights reserved.

Washington, D. C.—Church Building.—Percy S. Foster, chairman building committee of the Immanuel Baptist Church, 1327 F street N. W., has engaged George W. Stone, architect, 1753 Park road N. W., and F. W. Averill, architect, to prepare plans and specifications for its new church building to be erected at northeast corner 16th street and Columbia road.

Washington, D. C.—Crematorium.—District Commissioners will receive bids until May 25 for the construction of municipal crematorium on Washington Asylum grounds. Plans and specifications may be obtained upon application to office, No. 43 District Building.

Washington, D. C.—Dwelling.—George S. Cooper, architect, 1413 G street N. W., is preparing plans for a dwelling for himself to be erected on Wyoming avenue near 18th street N. W.; four stories; brick with stone trimmings; modern conveniences; cost about \$30,000.

Washington, D. C.—Dwellings.—Harry Wardman, builder, 1333 G street N. W., will erect 17 two-story brick dwellings at corner 14th and Newton streets N. W. and six two-story brick dwellings at corner 15th and Quincy streets N. W.; A. H. Beers, architect, 1333 G street N. W.

Washington, D. C.—School Building.—District Commissioners have selected site in the Howard University subdivision for the erection of new school building to cost about \$125,000.

Washington, D. C.—Dwellings.—A. M. Schneider, architect, Bond Building, 14th street and New York avenue N. W., is preparing plans for 13 two-story brick dwellings to be erected at corner 13th and F streets N. E., and also for seven two-story brick dwellings on V street between 17th and 18th streets.

Wendell, N. C.—Warehouse.—Wendell Tobacco Warehouse Co., Inc., will erect modern warehouse; 70x150 feet; 84 skylights 3x3 feet; two prize screws and elevator will be installed in prizehouse; cost of building, \$5500; G. W. Todd, architect and contractor.

Wendell, N. C.—Warehouse.—Wendell Tobacco Warehouse Co. incorporated with \$25,000 capital stock by M. A. Griffin, L. B. Knott, J. P. Richardson and others.

West Point, Ga.—Residence.—Messrs. Bruce & Everett, Atlanta, Ga., are preparing plans for residence for G. H. Lanier; cost \$5000.

Wheeling, W. Va.—Y. M. C. A. Building.—Young Men's Christian Association will erect proposed new building to cost \$100,000 on present site, 79x115 feet; Dr. J. L. Dickey, president and chairman of building committee.

Wheeling, W. Va.—Barn.—West Virginia

Exposition and State Fair Association will erect one-story cattle and poultry barn to cost \$12,000; Giesy & Faris, contractors.

Wheeling, W. Va.—High-school Building.—City will vote July 16 on the issuance of \$200,000 of bonds to erect high-school building. Address The Mayor.

Whitecastle, La.—School Building.—Andrew J. Bryan, 708 Hennen Building, New Orleans, La., is preparing plans for high-school building recently mentioned; building will be press brick and stone construction; slate roof; steam heat; latest plumbing; cost about \$25,000. Address School Commissioners.

Williamston, N. C.—City Hall.—City has voted affirmatively the issuance of bonds for building city hall. Address The Mayor.

Winnboro, S. C.—Residence.—William R. Rabb will build residence, for which plans will be prepared by Hamby & Hamby, 412 National Loan & Exchange Bank, Columbia, S. C.

Winnboro, S. C.—Residence.—Mrs. John F. Davis will erect residence, for which plans will be prepared by Hamby & Hamby, 412 National Loan & Exchange Bank, Columbia, S. C.

Zebulon (P. O. at Raleigh), N. C.—Warehouse.—Thos. J. Hastings and others will build warehouse to cost \$10,000.

Zebulon (P. O. at Raleigh), N. C.—Warehouse.—Zebulon Warehouse Co. has been incorporated and contracted with Henry Brum for erection of tobacco warehouse of wood construction to cost \$10,000; incorporators, F. B. Arendell of Raleigh and others. (Recently referred to.)

RAILROAD CONSTRUCTION.

Railways.

Apalachicola, Fla.—The Apalachicola Northern Railroad is reported complete from Apalachicola to River Junction, Fla., about 60 miles, and is now operating trains. R. B. Coleman is general manager.

Ardmore, I. T.—President A. J. Davidson of the Frisco system informs the Manufacturers' Record that there is no foundation for the report that the Frisco will build an extension from Ardmore to Lawton, O. T. The question of building from Ardmore to Waurika was up, but has been indefinitely deferred; surveys made from Ardmore via Waurika to Byers, 64 miles. This extension will probably be built ultimately.

Athens, Ga.—W. L. Hodges of Hartwell, Ga., and others are reported to be working on a plan to build a railroad from Athens, Ga., to Anderson, S. C., 67 miles. It will also reach either Carnesville or Danielsville, Ga., and Royston and Hartwell, Ga.

Atlanta, Ga.—The Georgia Terminal Co. has filed a mortgage to secure bonds amounting to \$4,000,000 for improvements. P. S. Arkwright of Atlanta is president.

Baltimore, Md.—The Maryland Electric Railways Co. will, it is reported, build an extension of several miles on the Annapolis Short Line to make an independent entrance to Baltimore. John Wilson Brown is president and general manager.

Baton Rouge, La.—John Scott & Sons of St. Louis have been given the contract to build the Baton Rouge, Hammond & Eastern Railroad from Baton Rouge to Hammond, La., 43 miles. Later an extension of 23 miles from Hammond to Covington, La., will be built. C. H. Fisk of Hammond, La., chief engineer, is reported as saying that construction will begin immediately and that the line east of Hammond will soon be put under construction. The Scott contract is said to amount to over \$940,000, or about \$22,000 per mile; 75-pound rails will be used.

Beaumont, Texas.—Reported that the Kenefick, Hammond & Quigley Co. have completed much of the line on the Colorado Southern, New Orleans & Pacific Railway and the Beaumont, Sour Lake & Western Railway, and have turned it over to the railroad companies for tracklaying.

Brenham, Texas.—An official announcement is reported that construction will begin May 27 on the Brazos Valley, Brenham & Gulf Railway. A. Ludwig is chief engineer.

Cape Girardeau, Mo.—The St. Louis Southwestern Railway, it is reported, will build a branch from Illinois to Cape Girardeau, Mo. M. L. Lynch is chief engineer at Tyler, Texas.

Charleston, W. Va.—E. M. Craig of Charleston is reported to be purchasing rights of way for a proposed short-line railroad from Charleston to Parkersburg, W. Va.

Corbin, Ky.—Construction is reported begun on the Cumberland River & Nashville Railroad between Tateville and Monticello; line projected is from Corbin, Ky., to Nashville, Tenn., 160 miles. C. E. Coon and Peter & Co. of Louisville are contractors.

De Funiak, Fla.—The Britton Land & Lumber Co., it is reported, will build a railroad through timber lands recently purchased to Darlington, Fla.

Denison, Texas.—Reported that bids have been received to grade an extension of about 20 miles for the Denison, Bonham & New Orleans Railroad from Ravena, Texas, east to Bois D'Arc creek, also for track and trestles. J. T. Munson is president of the Southern Railway Construction Co. at Denison, Texas, and E. D. Steger of Bonham, Texas, is president of the railway.

Denison, Texas.—The Frisco system, it is stated, will spend \$50,000 to improve its roadbed on the Red River division, this being in addition to ballast work. J. F. Hincley is chief engineer at St. Louis.

Elkin, N. C.—An election will be held in Elkin township on June 10 to vote on a bond issue of \$30,000 in aid of the proposed Elkin & Alleghany Railroad. A vote is also to be taken in Bryan township.

Fairmont, W. Va.—The Fairmont & Clarksburg Traction Co. informs the Manufacturers' Record that at present it has no intention of building a two-and-one-half-mile extension from Grasselli to Bridgeport.

Fairmont, W. Va.—An officer of the Pittsburgh & Lake Erie Railway writes the Manufacturers' Record denying the report that the company would build an extension from Fairmont, W. Va., to Brownsville, and also the proposed Buckhannon & Northern Railroad from Belington, W. Va., to Washington, Pa.

Fort Worth, Texas.—The Santa Fe, it is reported, contemplates building about 10 miles of new track in and around Fort Worth. C. F. W. Felt is chief engineer at Galveston, Texas.

Gastonia, N. C.—A movement is under way to build an electric railroad from Gastonia to Mount Holly. Among those interested are John Love, W. W. Glenn of Gastonia, C. E. Hutchison of Mount Holly and others.

Gotho, O. T.—H. E. Colby, president, writes the Manufacturers' Record that the Gotho & Southwestern Railway Co. charter calls for a line from Gotho to Frederick, O. T., via Cooperton, 45 miles. The company is ready to receive bids for construction and expects to build immediately 14 miles from Gotho to Cooperton. The directors are Herbert E. Colby, president and general manager; John W. Onstott, first vice-president; Peter Richert, second vice-president; John J. Kilewer, auditor; Robert B. Wells, secretary and treasurer. All are residents of Gotho excepting Mr. Onstott, of Cooperton.

Greensboro, N. C.—The Greensboro Electric Co. has, it is reported, been purchased by W. T. Van Brunt, Dee Allen and others, who are building the North Carolina Valley Railroad, and its railway from High Point to Greensboro is to be made part of the first-named line. A franchise has been granted by High Point.

Hampstead, Md.—The Hampstead & Manchester Railway Co. will, it is reported, extend its proposed line so as to build from Reisterstown, Md., to the Pennsylvania boundary for a connection with the Hanover & McSherrystown Railroad, making a through line from Hanover, Pa., to Baltimore, Md.

Henrietta, Texas.—Reported that contracts will be let immediately to restore the grade of the old Red River & Southwestern Railway and to extend it 25 miles north from Henrietta to a point on the Red river and to build altogether about 60 miles of track. W. B. Worsham, W. H. Featherstone, Ed S. Hughes of Abilene, Texas, and others are reported interested. About 22 miles from Henrietta to Scotland, Texas, are to be completed within four months. The Southwestern Railway Co. of Henrietta has filed its charter to build the proposed line with the following incorporators: M. G. Dennison, John W. Broad, E. H. Holcomb, T. L. Frazer, E. J. Durham, A. Gray of Fort Worth, C. W. Hutchison of Fort Worth, Henry James and Ed S. Hughes of Abilene, Texas, and Henry J. Scott of Toronto, Canada.

Houston, Texas.—The Galveston-Houston Electric Co. is reported incorporated at Augusta, Maine, with \$6,000,000 capital. The promoters, according to a report from that city, are William K. Neal, Richard E. Harvey, Charles E. Gurney, Ernest E. Noble, Albert E. Neal, Fred D. Harvey, John H. Ridge and Davis W. Snow.

Houston, Texas.—Concerning the report that the Missouri, Kansas & Texas Railway would spend \$150,000 to improve terminals in Houston, an official informs the Manufacturers' Record that all which may be done is the laying of some additional tracks and that the report is an error.

Houston, Texas.—The Houston-Galveston Interurban Electric Railway Co. has authorized an issue of \$5,000,000 in bonds, and construction is to begin soon.

Jane, Va.—James Hatcher of Pikeville, Ky., it is reported, has been employed to superintend construction of the Buchanan & Dickenson Railway, projected by the Yellow Poplar Lumber Co. of Coal Grove, Ohio.

Kansas City, Mo.—Mr. Ira G. Hedrick, chief engineer, informs the Manufacturers' Record that the Kansas City, St. Joseph & Excelsior Springs Railway Co. proposes to build 80 miles of line. Jos. J. Helm is president; address, 309 Keith & Perry Building, Kansas City, Mo.

Lawton, O. T.—J. M. Bellamy, president of the Lawton, Wichita Falls & Northwestern Railway Co. is reported as saying that surveys are made and capital and right of way secured for the proposed line from Lawton, O. T., to Wichita Falls, Texas, 49 miles. Contracts are to be let within three months. A. J. Robinson of Frederick, O. T., is chief engineer.

Lafayette, La.—The Lafayette Progressive League is reported to be organizing for the purpose of securing the building of a railroad from either Eunice or Melville, La. Mayor C. O. Manton, who was president of a meeting, or E. C. Greig, secretary, can give information.

Live Oak, Fla.—Mr. Thomas Dowling writes the Manufacturers' Record confirming the report that he and associates will build a railroad from Odessa, Fla., to Tampa, Fla., but he also says that the company is not yet organized.

Lumberton, N. C.—The Carolina, Virginia & Southern Railroad Co. is reported to be pushing work on its line from Lumberton to Fayetteville, and several miles of track have been laid.

Macon, Ga.—The American Engineering Co., Indianapolis, Ind., it is reported, has the contract for preliminary electrical engineering for the Macon, Americus & Albany Electric Railway, and G. H. Binkley, chief engineer, has charge of the work. The line, it is said, will be of very substantial construction.

Madisonville, Ky.—The Madisonville, Hartford & Eastern Railroad Co., which is building a line from Madisonville to Cloverport, is reported to have about 40 per cent. of the grade completed.

Marion, N. C.—President W. A. Garrett of the Seaboard Air Line is reported in a dispatch from Charlotte, N. C., as saying that the company will establish a terminal at Wilmington, where will be handled freight from the South & Western Railway, which is being built by kindred interests. This appears to confirm the previous report that the Seaboard would make its tidewater terminal at either Wilmington or Southport, just below Wilmington. N. C. W. L. Seddon is chief engineer at Portsmouth, Va.

Nashville, Tenn.—Survey is reported under way to double-track the Louisville & Nashville Railroad from Nashville, Tenn., to Decatur, Ala. W. H. Courtenay is chief engineer at Louisville, Ky.

New Orleans, La.—J. B. Paul, superintendent of the Texas & Pacific Railway, is reported as saying that the Texas & Pacific will, within a week, connect its lines with the extension of the Missouri Pacific Railway, thus completing the Gould low-grade route along the west bank of the Mississippi river from New Orleans to St. Louis.

New Orleans, La.—A letter to the Manufacturers' Record says that Morgan's Louisiana & Texas Railroad & Steamship Co. will shortly invite bids to reconstruct all tracks in its yards at and near the head of Elysian Fields avenue. A. V. Kellogg is engineer at Houston, Texas.

New Orleans, La.—The Louisville & Nashville Railroad, it is reported, will build a large freight yard two miles long and 350 feet wide on land recently purchased at Gentilly Station and also an auxiliary yard. One section containing 10 or 11 miles of track is to be started immediately. W. H. Courtenay is chief engineer at Louisville, Ky.

Norfolk, Va.—The Virginian Terminal Railway Co., which is to provide terminals for the Virginian Railway, has filed a mortgage to secure \$10,000,000 of 5 per cent. bonds.

Oakland, Md.—The Baltimore & Ohio Railroad Co. informs the Manufacturers' Record that there is nothing in the report that the company is negotiating for the Kendall Lumber Co.'s railroad from Oakland to use it in building a connection through to Confluence, Pa.

Odessa, Fla.—Reported that a railway will be built from Odessa to Tampa, Fla., by Thomas Dowling, C. H. Brown and W. G.

Hair of Live Oak, Fla., and C. H. Tedder of Tampa, who purchased the Muller-Luts Lumber Co.

Oklahoma City, O. T.—J. W. Pryer, secretary, informs the Manufacturers' Record that the Oklahoma City, Henryetta & St. Louis Railway Co. officers are: John Dibble, president; R. H. Gardner, vice-president; J. W. Pryer, secretary, all of Oklahoma City; J. H. Wheeler, treasurer, Kansas City, and A. E. Sumner, general manager, New York city. The proposed line is from Henryetta to Oklahoma City, but, including two extensions, it will be altogether about 300 miles long.

Onalaska, Texas.—Construction is reported begun on the extension of the Beaumont & Great Northern Railroad from Onalaska to Livingston, Texas.

Owensboro, Ky.—E. T. Franks, vice-president of the Owensboro & Rockport Terminal & Bridge Co., is quoted as saying that construction contracts may be let this summer or in the fall for the proposed line 12 miles long. The Osborn Engineering Co., Cleveland, Ohio, will make the survey, but right of way has not yet been obtained.

Pensacola, Fla.—Henry McLaughlin, president of the Pensacola, Alabama & Tennessee Railroad, is reported as saying that within nine months the line will be extended from a point near Muscogee, Fla., to Mobile bay, and connection will be made to Mobile by the time the track is completed, but the trestle across Mobile bay will require two years to build. Permanent survey is to begin June 1 and construction is to follow up the engineers. Contracts for ties and rails are already awarded. About 40 miles of new line will be built.

Pine Bluff, Ark.—An official is reported as saying that preliminary survey for the Arkansas, Louisiana & Gulf Railway has been made from Pine Bluff to Monticello by H. Levison; Monticello to Rofe Junction by G. W. Ely; Crossett via Rofe Junction, Ark., and Bastrop, La., to Monroe, La., by J. L. Polk. A. H. Van Auken is now making location surveys. Line will be 133 miles long. Pine Bluff to Monroe, with branch nine miles from Crossett to Rofe Junction. J. Harris, Monroe, La., has the only grading contract that has been let, and work is under way. J. M. Parker is general manager, Masonic Temple, Pine Bluff, Ark.

Pine Hall, N. C.—Spencer B. Hanes is reported to be chief engineer for the Pine Hall & Southern Railroad, for which preliminary survey has been made and rights of way obtained from a point near Pine Hall, on the Norfolk & Western, to Mitchell, on the Southern Railway, seven miles.

Port Arthur, Texas.—A. Oppenheim of London, England, is reported as saying that a new railroad is projected from Port Arthur to Denison, Texas, about 250 miles, via Newton, Texas, and Shreveport, La. He represents A. de Jongh & Co., bankers, of London. F. S. Colton of Pittsburg, Pa., is also said to be interested.

Randlett, O. T.—A railroad company is reported to be organizing to build a line from Randlett to Lawton, O. T.; capital \$100,000. Among those interested are S. A. Gardner, president of the Bank of Randlett; H. C. Jerome, president of the Farmers and Merchants' Bank of Randlett; J. C. Adams, manager of the Davis Lumber Co., and E. H. Bickley, attorney.

Reldsville, N. C.—The Rockingham & Caswell Railway Co. has decided to engage a civil engineer to survey the line from Stoneville to Yanceyville. Right of way is already secured between Yanceyville and Reldsville, and is yet to be obtained from Reldsville to Stoneville. R. T. Williams is president and H. A. Hayes secretary.

Robert Lee, Texas.—Reported that charter has been received for the proposed railroad from Robert Lee to Fort Chadbourne, about 14 miles. J. A. Spencer and W. B. Smith of San Angelo and W. C. Merchant of Robert Lee are said to be interested.

Rusk, Texas.—The State Penitentiary Board, it is reported, has decided to begin construction on the proposed extension of the Texas State Railroad. Contract labor will be employed.

San Angelo, Texas.—T. S. Bedford, resident engineer, is reported as saying that construction of 25 miles of track will shortly be started on the Kansas City, Mexico & Orient Railway out of San Angelo.

San Antonio, Texas.—Col. Uriah Lott of San Antonio is reported to be planning a railroad 800 miles long from Amarillo, Texas, to Brownsville, Texas, construction probably to begin at San Antonio. North of San Antonio it would reach Fredericksburg, Mason and Brady, Texas, and southward it would reach Pleasanton, Oakville and Kingsville, with probably a branch to Beeville and Refugio.

Savannah, Ga.—The Railroad Construction & Finance Co. is reported organized with \$500,000 capital to build the proposed Savannah & Southwestern Railway. The officers are: President, J. H. H. Entellman, Savannah; vice-president, H. R. Brown, Macon; treasurer, M. A. Obyrne, Savannah; secretary, D. G. Purse, Savannah.

Sherman, Texas.—W. B. Drake, vice-president and general superintendent of the Frisco at Fort Worth, Texas, informs the Manufacturers' Record that the improvements contemplated at Sherman, Texas, consists of only additional service tracks to be built by the company's forces.

Thomasville, Ga.—The Atlanta, Birmingham & Atlantic Railway will, it is reported, shortly begin construction of an extension from Thomasville to Brookville. Alexander Bonnyman is chief engineer, Empire Building, Atlanta.

Statesville, N. C.—A stockholders' meeting of the Statesville Air Line Railroad Co. to elect directors is called for May 23. Dr. J. J. Mott is president. About \$275,000 in bonds have been voted in Iredell and Yadkin counties to build the line.

Washington, N. C.—Success is reported to have followed the efforts of the committee on subscriptions for the Mattamuskeet Railroad Co. George J. Studdert, E. J. Hocutt and H. C. Carter, Jr., are interested.

Wichita Falls, Texas.—The Wichita Falls & Northwestern Railway Co. is reported to have authorized a bond issue of \$20,000 per mile to complete its line beyond the Red river to connect with the Frisco system at or near Frederick, O. T.

Wichita Falls, Texas.—The Wichita Falls & Southern Railroad will, it is reported, be completed by October 1 as far as Archer City, Texas, and by early next year to coal fields in Young county. T. H. Kempner of Galveston, Joseph A. Kemp and Frank Kell of Wichita Falls are the promoters. Contracts are reported let for bridge material, ties and rails and for part of the grading.

Williamsville, Va.—Williams Bros., it is reported, will survey for the proposed railroad of the Shenandoah Lumber Co. from Millboro to Williamsville, about 20 miles.

Street Railways.

Ensley, Ala.—Reported that S. H. Meade, R. S. Meade and others have been granted a franchise for an electric railway in Ensley.

Fort Worth, Texas.—The Northern Texas Traction Co. has been granted a franchise for a two-mile extension.

Grafton, W. Va.—The Grafton Street Railway Co. is reported to have awarded the construction contract for two and one-half miles of line to Tolbert Bros. of Fairmont, W. Va., work to begin by May 28. The Westinghouse Electric & Manufacturing Co. of Pittsburg is arranging to put in the power plant.

Laurel, Miss.—The Gulf States Investment Co., which owns the electric-light plant in Laurel, has applied to the City Council for a street-railway franchise. A franchise has also been asked by Frank Gardner and others.

Oklahoma City, O. T.—The Oklahoma City Electric Railway Terminal Association has been chartered to build a terminal line 12 miles long for the use of all electric and interurban railroads; capital \$1,000,000. The directors are Guy V. McClure, Warner E. Moore, Carlos Combs, J. J. Johnson and Frederick S. Combs of Oklahoma City.

San Angelo, Texas.—J. H. Ransom of Hereford, Texas, has applied to the City Council for a street-railway franchise in San Angelo.

St. Louis, Mo.—A reported issue of \$5,000,000 of 5 per cent. five-year notes of the North American Company and the reported sale of half of the issue to New York and Boston bankers is, it is said, for the purpose of making improvements to the lines of the St. Louis & Suburban Railway and other property. Robert McCulloch, general manager of the United Railways of St. Louis, can probably give information.

Wichita Falls, Texas.—Application for a street-railway franchise has been made to the City Council by a company with \$100,000 capital, which proposes to complete six miles of line within six months.

Messrs. Mauran, Russell & Garden.
In the page advertisement of the St. Louis (Mo.) Portland Cement Co. in the Manufacturers' Record of May 9 appeared an error as to the architects for the Butler Bros. Building at St. Louis. Messrs. Mauran, Russell & Garden, the well-known architects of St. Louis, prepared the plans and specifications. Some 80,000 barrels of Red Ring Portland cement were furnished in connection with the construction work by the St. Louis Portland Cement Co.

MACHINERY, PROPOSALS AND SUPPLIES WANTED.

Manufacturers and others in need of machinery of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery needed we will make their wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. The Manufacturers' Record has received during the week the following particulars as to machinery that is wanted.

Adding Machines.—J. Cabeza, Camera Oficial, Comercio, Industria y Navegacion, Oviedo, Spain, wants catalogues and price-lists on adding machines.

Automobile Supplies.—See "Sprocket Chains."

Belting.—G. W. M. Keller, Middletown, Md., wants prices on second-hand belting.

Blower System.—Le Roy S. Davidson, Kershaw, S. C., in the market for blower system.

Bobbin and Shuttle Manufacturers.—Alexander Bros., Selmer, Tenn., want to correspond with manufacturers of bobbins and shuttles from dogwood and persimmon blocks.

Boiler.—Variety Works Co., Dawson, Ga., wants 125-horse-power high-pressure or 150-horse-power low-pressure boiler. State freight allowance to Holts Station, Ga., on Columbia branch of Central of Georgia Railway.

Boilers.—Jones & Woolfolk Co., Lexington, Tenn., wants boilers.

Boilers.—Franklin Kaolin & Mica Co., Franklin, N. C., wants 80-horse-power boiler.

Bone-mill Machinery.—C. F. Monroe, Henta Bone Co., Flemington, W. Va., wants bone-mill machinery, including crusher, conveyors, screens and batch mixer.

Bridge.—Sealed proposals will be received until June 14 for (1) removing present floor of the county bridge across Tennessee river at end of Gay street; (2) putting in a steel-plate floor; (3) paving roadway of bridge with asphalt, bitulithic, brick or wood block; (4) paving roadway of abutments with asphalt, bitulithic, brick or wood block. About 250 tons of steel and two lots of paving of about 2500 square yards each will be required. Separate bids will be received on 1 and 2, and on each of the lots of paving covered by 3 and 4. Proposals must be addressed to A. D. Collier, County Judge, Knoxville, Tenn., and must contain a certified check on local bank for \$400 made payable to him; usual rights reserved. For plans and specifications apply to bridge engineer, L. C. Carter, care of Carolina Engineering Co., Burlington, N. C.

Bridge.—Commissioners' Court, M. N. Coker, Commissioner, Anniston, Ala., will receive bids until June 3 for construction of bridge across the Oatchie river, and will also consider and receive bids for covered bridge at said place.

Building Materials.—S. P. Miller, Haskell, Texas, wants prices on building materials, including lumber, shingles, sash, doors and brick.

Building Materials.—Congress Construction Co., 1009 Hartford Building, Chicago, Ill., wants building materials, including ornamental terra-cotta, structural steel and ornamental iron, for \$250,000 City Hall building at New Orleans.

Building Materials.—Dunkirk Window Glass Co., Dunkirk, Ind., wants estimates on building material, as follows: Dimension timber, lumber, Portland cement, red brick, fire brick, building lime, roofing, etc.

Building Materials.—M. A. McKnight & Co., Beaumont, Texas, want building materials, including iron, mill work and plate glass, for \$80,000 building.

Building Materials.—McCullers Bros., Box 222, Live Oak, Fla., want building materials, including tin roofing, glass front, iron columns, doors, sills, etc.

Building Materials.—M. A. McKnight & Co., Keith Building, Beaumont, Texas, want estimates on building materials, including steel and iron, terra-cotta, plate glass, mill work, tile roofing, etc., for \$80,000 building.

Cable-conveying Equipments.—J. Cabeza, Camera Oficial, Comercio, Industria y Navegacion, Oviedo, Spain, wants catalogs and prices on wire aerial equipments for

handling minerals; thinks of buying equipment to handle 2000 tons of iron ore per month.

Carousel.—See "Merry-Go-Round."

Cement.—Dunkirk Window Glass Co., Dunkirk, Ind., wants prices on Portland cement and lime.—S. P. Miller, Haskell, Texas, wants prices on cement and lime.

Clayworking Machinery.—Franklin Kaolin & Mica Co., Franklin, N. C., wants clayworking machinery.

Coal Bunkers.—Sealed proposals will be received at Treasury Department, office of Supervising Architect, Washington, D. C., until June 15 for construction of coal bunkers, etc., at the U. S. Mint, Philadelphia, Pa., in accordance with plans and specifications, copies of which may be had at above office or at office of Custodian, Philadelphia, at the discretion of James Knox Taylor, Supervising Architect.

Concrete-block Machinery.—C. S. Nicholson, Bethune, N. C., wants information on manufacture of concrete blocks and prices of machinery.

Conveying Machinery.—J. W. Team, 105 Grand avenue, Oklahoma City, O. T., wants machinery for elevating sand 10 to 15 feet from shallow stream. (See "Dredging and Conveying Machinery.")

Cotton Compress.—Edw. F. Cost, vice-president Kansas City Southern Railway, Kansas City, Mo., wants small compress for reshaping cotton out of condition from rough handling en route; press is not for pressing flat cotton or increasing density, but simply for reshaping.

Cotton-cordage Machinery.—Columbus Manufacturing Co., Columbus, Miss., wants machinery for manufacturing cotton rope and cordage.

Creamery Machinery.—See "Dairy Machinery."

Crematorium.—Sealed proposals will be received at office of Commissioners of District of Columbia, Washington, D. C., until May 25 for erecting municipal crematorium on Washington Asylum grounds. Forms, specifications and necessary information may be obtained at above office, Room 43; Henry B. F. Macfarland, Henry L. West and Jay J. Morrow, Commissioners.

Crusher and Screener.—Gravel Switch Land Co., W. J. Waller, secretary, Morganfield, Ky., is in the market for rock screener and crusher.

Crusher Rolls.—Union Sand & Fertilizer Co., Box 482, Clarksburg, W. Va., wants rock-crushing rolls; David M. Morris, general manager.

Cutting Machinery.—Alpern Bag & Metal Co., 1020 Tchoupitoulas street, New Orleans, La., wants a few union special machines, also shears for cutting iron, burlap and twine.

Dairy Machinery.—H. K. McCutcheon, 204 Bayou street, Houston, Texas, wants to correspond with manufacturers of dairy machinery.

Dike Repairs.—United States Engineering Office, Savannah, Ga.—Sealed proposals for raising and repairing dikes and training walls in Savannah harbor will be received at this office until 12 noon (Eastern standard time), June 18 and then publicly opened; information furnished on application; Dan C. Kingman, lieutenant-colonel Corps of Engineers.

Dredge.—Sealed proposals for constructing 10-inch hydraulic dredge will be received at U. S. Engineer's office, 22d and K streets N. W., Washington, D. C., until June 12. Information on application; Spencer Cosby, captain engineers.

Dredgeboat.—Gravel Switch Land Co., W. J. Waller, secretary, Morganfield, Ky., wants dredgeboat or other ditch-digging machine.

Dredging and Conveying Machinery.—J. W. Team, 105 Grand avenue, Oklahoma City, O. T., wants machinery for dredging and elevating sand out of shallow stream, to be elevated 10 to 15 feet; machine to be of large capacity.

Drilling Machinery.—E. A. Lunsford, Hilltons, Va., wants prices on well-drilling machinery.

Drilling Machinery.—Southeast Arkansas Development Co., R. W. Wilson, secretary, Monticello, Ark., wants machinery for drilling for oil and coal.

Drykilns.—Le Roy S. Davidson, Kershaw, S. C., in the market for drykilns.

Electric Generator.—Dalton Excelsior Co., Dalton, Ga., wants 50 to 75-light 110 to 230-volt generator.

Electric-light Equipment.—Board of Public Works, Seneca, S. C., wants equipment for electric-light plant; steam power. Address L. A. Edwards.

Electric-light Plant.—Bids will be received by Committee on Electric Lighting, Dora, Ala., until June 6 for complete installation and erection, or material and machinery only, for municipal electric-light plant. Specifications can be procured from chairman of committee, Dora, Ala.; Thornton Company, Birmingham, Ala., engineers.

Electric-light Plant.—See "Water-works."

Electric-light Plant.—Carthage Electric Light Co., Carthage, Tenn., T. J. Fisher, president, wants estimates on electric-light plant for town of 1000 population.

Electric Motors.—The Elizabeth Mills, Charlotte, N. C., will possibly need two 75-horse-power electric motors for driving 6000 spindles.

Electric Machinery.—City of Rocky Mount, N. C., will want electric machinery for enlargement of present plant; A. S. Lyon, superintendent public works.

Electric Motor.—Pembroke Roller Mills, Pembroke, Ky., wants prices on 30 or 35-horse-power electric motor.

Electric Wiring.—See Building Note under Fort Sam Houston, Texas.

Electric Wiring.—See Building Note under Little Rock, Ark.

Electrical Equipment.—Alleghany Construction Co., Clifton Forge, Va., wants prices on electric wiring and fixtures.

Electrical Equipment.—Union Sand & Fertilizer Co., Box 482, Clarksburg, W. Va., wants electrical equipment.

Elevators.—Congress Construction Co., 1009 Hartford Building, Chicago, Ill., wants elevators and equipment for \$250,000 City Hall building at New Orleans.

Elevators.—McCullers Bros., Box 222, Live Oak, Fla., want elevators.

Engine.—C. F. Monroe, Heneta Bone Co., Flemington, W. Va., wants gas engine, 25 horse-power.

Engine.—See "Traction Engine."

Engine.—Dalton Excelsior Co., Dalton, Ga., wants high-grade 100-horse-power automatic or Corliss engine; first-class condition.

Engine.—A. E. Ray, Box 234, Tullahoma, Tenn., wants one-horse-power gasoline engine.

Engine.—Variety Works Co., Dawson, Ga., wants 50-horse-power (minimum capacity) engine. State freight allowance to Holts Station, Ga., on Columbia branch of Central of Georgia Railway.

Engine.—C. T. Schmitt & Co., 514 Union Building, 9-15 Clinton street, Newark, N. J., wants six or seven-horse-power gasoline engine, second-hand, nearly new, good condition; horizontal preferred.

Engineering Literature.—O. G. Joseph, 1501 Lincoln Savings Bank Building, Louisville, Ky., wants catalogues and other literature pertaining to general work in civil engineering.

Engines.—Jones & Woolfolk Company, Lexington, Tenn., wants engines.

Engines.—Franklin Kaolin & Mica Co., Franklin, N. C., wants 80-horse-power engines.

Engines and Boilers.—City of Rocky Mount, N. C., will want engines or turbines and water-tube boilers. A. S. Lyon, superintendent public works.

Excelsior Machinery.—D. L. Snodgrass, Jr., care of Trotter Bros., Chattanooga, Tenn., wants addresses of manufacturers of excelsior machinery.

Fence Machine.—A. F. Snyder, Weissport, Pa., wants addresses of manufacturers of fence machine for weaving in slats.

Fertilizer Machinery.—Union Sand & Fertilizer Co., Box 482, Clarksburg, W. Va., wants machinery for manufacturing fertilizers.

Fertilizer Machinery.—Camden Oil Mills, Camden, Ark., wants plans for fertilizer mixing plant 40x120 feet, also machinery for same; capacity to be 60x30 tons.

Filling.—Sealed proposals will be received at Treasurer's Office, Southern Branch, N. H. D. V. S., National Soldiers' Home, Va., until May 31 for filling behind Jones creek revetment 16,000 yards, more or less, as per accompanying specifications and drawing No. 20, in accordance with instructions and specifications, copies of which, with blank proposals and other information, may be had upon application to B. A. Beeson, treasurer.

Filter Plant.—City of Rocky Mount, N. C., will want filter plant. A. S. Lyon, superintendent public works.

Fire-brick.—See "Building Materials."

Flooring Machinery.—J. W. Brady, 1505 West Fayette street, Baltimore, Md., wants to confer with makers of machinery for manufacturing parquet flooring.

Furniture Machinery.—Leonard Vyne, North Wilkesboro, N. C., wants details on manufacture of tables and chairs, prices on machinery, etc.

Hat-manufacturing Equipment.—J. A. Broadus, Biloxi, Miss., wants to correspond with makers of hat-manufacturing machinery.

Heating.—See Building Note under Little Rock, Ark.

Heating Apparatus.—O. L. Franklin, Bank of Leesville, Leesville, La., wants steam-heating apparatus.

Heating Apparatus.—City of Gatesville, Texas, Davis R. Hall, Mayor, will want competitive prices on different kinds of heating apparatus for \$25,000 school building.

Heating Apparatus.—County Board of Education will receive sealed bids until May 25 at office of J. B. Brown, county Superintendent of Schools, in Courthouse, Chattanooga, Tenn., for construction of a steam-heating apparatus in county high school to be erected near Ridgedale, Tenn., according to plans and specifications prepared by Adams & Alsop and which may be examined at their office, Chamberlain Building, Chattanooga. Each bid must be accompanied with certified check for \$100, payable to W. B. Garvin, chairman of board; usual rights reserved.

Heating Plant.—Alleghany Construction Co., Clifton Forge, Va., wants estimates on steam-heating plant.

Holists.—See "Mining Equipment."

Ice and Refrigerating Plant.—Separate sealed proposals will be received until June 15 for installing ice and refrigerating plant at Fort Dade, Ala.; information on application. U. S. reserves usual rights; Capt. M. H. Barry, Constructing Quartermaster.

Ice Machinery.—Decatur Ice & Coal Co., Decatur, Ala., wants ice machinery, 50 tons capacity.

Ironworking Machinery.—See "Cutting Machinery."

Ironworking Machinery.—Atlantic Wagon & Vehicle Co., Rose Hill, N. C., wants ironworking machinery.

Jetty Work.—U. S. Engineer office, 1539 Louisiana avenue, New Orleans, La.—Sealed proposals for jetty work at Sabine Pass, Texas, will be received at this office until 11 o'clock A. M. June 15, and then publicly opened. Information furnished on application; J. F. McIndoe, captain engineers.

Laundry Machinery.—J. A. Broadus, Biloxi, Miss., wants to correspond with makers of steam-laundry machinery.

Machine Tools.—See "Cutting Machinery."

Manufactures Generally.—M. Dizengoff, Jaffa (Palestine), Asia, wants prices on hardware for buildings, carpenters', blacksmiths' and mechanics' tools, horseshoes, wheelwright supplies, axles, springs, rough castings, shaftings, pulleys, belting, forged and drawn tubing, steam and water tanks, mountings for conduits, portable forges, building materials, cement, hydraulic lime, corrugated sheet-iron, stoves and furnaces for kitchens, iron and copper channels, stair-heads, chairs, etc.; prices to be in francs, by 100 kilos; payments to be in cash with 3 per cent. discount and 2 per cent. for ourselves; correspondence in French.

Merry-go-round.—R. A. McDaniel & Co., Denton, Md., want steam merry-go-round; second-hand; good order; low price.

Mill Supplies.—Jones & Woolfolk Co., Lexington, Tenn., wants sawmill supplies.

Mill Supplies.—Central Light & Power Co., Amite City, La., will shortly be in need of one line shaft, 2 15-16 inches diameter, 22 feet long; one wood pulley 40 inches diameter, 18-inch face; one clutch pulley, 18 inches diameter, 20-inch face, 125 horse-power; one clutch pulley, 22 inches diameter, 16-inch face, 75 horse-power; five hangers for line shaft as above, for uprights.

Mining Equipment.—Grahamite Company, 315-18 North Texas Building, Dallas, Texas, wants prices on mining equipment, holists, etc.

Mixing Plant.—See "Fertilizer Machinery." **Motors.**—A. Karim Khan & Bro., Nihor District Bijnore, Cawnpore, India, want information and prices on motors for changing ordinary cycles to motor cycles; prices to be f. o. b. Calcutta.

Ornamental Iron.—See "Building Materials."

Ornamental Terra-cotta.—See "Building Materials."

Paving.—City of Elberton, Ga., will invite bids within 30 days for 10,000 to 15,000 square yards of vitrified brick paving. H. S. Jaudon of Thomasville, Ga., is the engineer in charge.

Paving.—Board of Improvement of Lake

Village, Ark., will receive bids until June 10 for building concrete sidewalk five feet wide and three-quarters of a mile long; usual rights reserved. Specifications can be obtained from J. C. Gillison, secretary; E. P. Toney, Mayor.

Paving.—Contracts will be awarded for macadamizing streets of Princeton, W. Va., to the amount of \$23,000. Address H. G. Woods, Mayor.

Paving Work.—Bids will be received until June 6 by H. E. Moody, City Clerk, Carterville, Mo., for constructing cement sidewalks on 11 streets, amounting to about 140,000 square feet, at an estimated cost of \$18,000.

Pipe.—See "Sewer Piping" and "Water Mains."

Pipe.—American Manufacturing Corporation, Norfolk, Va., wants three-quarter-inch second-hand pipe.

Plumbing.—See Building Note under Fort Sam Houston, Texas.

Plumbing.—See Building Note under Little Rock, Ark.

Pulleys and Shafting.—See "Mill Supplies."

Pumping Machinery.—Warren Walker, Augusta, Ga., wants pumping machinery for domestic use; taking water from well.

Railway Equipment and Construction.—Gotebo & Southwestern Railway Co., H. E. Colby, president and manager, Gotebo, O. T., open for bids on equipment and construction for proposed steam railway; 45 miles.

Railway Locomotive.—G. T. Bevins, Coudersport, Ky., wants second-hand engine, 10 or 12-ton, for wooden rails of 36 or 42-inch gauge.

Railway Rails.—Blue Ridge Tin Corporation, Kings Mountain, N. C., wants new or second-hand light steel rails, 16 pounds to the yard, for immediate delivery. Address J. W. Foster, Jr., superintendent.

Road Construction.—Sealed proposals addressed to County Commissioners of Cecil County, Elkton, Md., indorsed "Proposals for improving public highway between Elkton and Chesapeake City, known as the Chesapeake City road," and "Proposals for improving public highway between Elkton and Singery, known as the Plank road," will be received until June 3. All proposals must be made on forms furnished by State Geological Survey Commission, to be obtained through its office in Baltimore, Md. Work to be done in both instances includes grading and macadamizing of about one mile of road according to plans and specifications on file at office of County Commissioners. For the former work a steam roller and stone-crusher will be furnished contractor by county under conditions named in contract and specifications. Each proposal must be accompanied by certified check for \$300, payable to County Commissioners of Cecil County; usual rights reserved; C. A. Benjamin, president of board.

Road Construction.—Sealed proposals, addressed to County Commissioners of Prince George County, Upper Marlboro, Md., indorsed "Proposal for Improving Public Highway Between Washington and Marlboro, Known as the Marlboro Road, Sections 2, 3 and 4," will be received until May 28. Proposals must be made on forms furnished by State Geological Survey Commission, obtained through its office in Baltimore, Md. Work to be done includes grading and macadamizing of about two and one-half miles of road according to plans and specifications on file in office of County Commissioners. Each proposal must be accompanied by certified check for \$300, payable to County Commissioners of Prince George County; usual rights reserved; Henry St. J. L. Briscoe, clerk of Board.

Road Construction.—Sealed proposals, addressed to Highways Commission of Baltimore County, Towson, Md., indorsed "Proposals for Improving Public Highway Between Reisterstown Pike and Park Heights Avenue, Known as Belvedere Avenue," will be received until June 13. Proposals must be made on forms furnished by State Geological Survey Commission, to be obtained through its office in Baltimore, Md. Work to be done includes grading and macadamizing of about one-half mile of road according to plans and specifications on file at office of Highways Commission. Each proposal must be accompanied by certified check for \$300, payable to Highways Commission of Baltimore County; usual rights reserved; E. Stanton Bosley, secretary of Board.

Road Construction.—Sealed proposals, addressed to County Commissioners of Carroll County, Westminster, Md., indorsed "Proposals for Improving Public Highway from Mount Pleasant Northerly, Known as the Nicodemus Road," will be received until June 3. Proposals must be made on forms furnished by State Geological Survey Commission, obtained through its office in Bal-

timore, Md. Work to be done includes grading and macadamizing of about one mile of road according to plans and specifications on file at office of County Commissioners. Each bid must be accompanied by certified check for \$300, payable to County Commissioners of Carroll County; usual rights reserved; D. J. Hesson, George E. Benson and George W. Brown constitute Board.

Road Construction.—Sealed bids will be received by Board of County Commissioners, C. Benedict, chairman, until June 5 at clerk's office, Jacksonville, Fla., for construction of county road from South Jacksonville to Atlantic Beach, approximately 12 miles. Bids to include computed clearing, grubbing and grading in a total amount, according to plans, profiles and specifications on file in office of Roland Woodward, consulting engineer, Rooms 6, 7 and 8 Board of Trade Building; usual rights reserved.

Roofing.—S. P. Miller, Haskell, Texas, wants prices on felt roofing.

Roofing.—Dunkirk Window Glass Co., Dunkirk, Ind., wants prices on roofing.

Sawmill Equipment.—Collins Co., Pennsylvania, W. Va., wants sawmill equipment, including edger, trimmer, lumber trucks, tools, etc.

Sawmill Skidder.—P. S. Gilder, Selma, Ala., wants sawmill skidder; second-hand.

Sawmills.—H. A. Paine, Willow and Wood streets, Houston, Texas, wants to confer with manufacturers, in seaboard territory, of sawmill machinery.

Sedimentation Tank.—City of Rocky Mount, N. C., will want sedimentation tank; A. S. Lyon, superintendent public works.

Sewerage.—Sealed Bids, addressed to Board of Public Works, H. F. Van Dusen, chairman, and endorsed on outside of envelope with name of bidder, followed by words "Bid for Sewer Work," will be received at office of board until May 23 for constructing certain sewers and their appurtenances according to plans and specifications on file in office of City Engineer. Each proposal must be accompanied by certified check for \$5000, payable to T. J. Gillespie, City Treasurer. General plans, maps, profiles, etc., can be obtained at office of City Engineer, on deposit of \$25 with clerk of board. Bond of not less than one-half the estimated cost of work will be required of successful bidder; usual rights reserved.

Sewerage.—Board of Public Works, Richmond, Ind., will receive separate bids until June 5 for construction of sewerage system four miles in length and disposal plant. Plans and specifications may be seen in office of said board or copies will be sent upon receipt of \$5; Fred R. Charles, City Engineer; C. W. Merrill, W. P. O'Neal and B. B. Johnson, Board of Public Works.

Sewerage.—Sealed proposals will be received by Board of Affairs, Parkersburg, W. Va., until June 6 for furnishing all material and labor for the construction of the extension of two-ring brick storm sewer six feet in diameter on 13th street according to plans and specifications prepared by and on file in office of J. V. Dunbar, City Engineer. All bids must be accompanied by certified check for \$500, payable at a bank, to order of city of Parkersburg. Work to commence 15 days after awarding of contract and be completed January 1, 1908; usual rights reserved; Frank Good, Auditor.

Sewerage.—Sealed proposals will be received by Forrest Shell, City Clerk, Mangum, O. T., until May 27 for furnishing material and constructing system of sewers in accordance with plans and specifications on file in office of City Clerk or J. W. Ryder, engineer, Granite, O. T. Specifications and blank proposals may be had on application to City Clerk, and extra copies of plans and profiles may be obtained by sending \$5 to engineer to cover cost; usual rights reserved. Each bid must be accompanied by certified check of \$500.

Sewerage System.—See "Water-works."

Sewer Piping.—City of Greenville, Texas, wants first-grade piping for sewer system; Joseph F. Nichols, Mayor.

Shop Machinery, etc.—Proposals for shop machinery, dipper lips for steam shovels, rivets, skylight glass, asbestos cement, etc., will be received at office of D. W. Ross, general purchasing officer, Isthmian Canal Commission, Washington, D. C., until June 4. Blanks and general information relating to Circular No. 367 may be obtained from above office or the offices of the assistant purchasing agents, 24 State street, New York, N. Y.; Custom-house, New Orleans; 1086 North Point street, San Francisco, and 410 Chamber of Commerce Building, Tacoma, Wash.; also from Chief Quartermaster, Chicago; Depot Quartermaster, St. Louis; Depot Quartermaster, Jeffersonville, Ind., and Chief Quartermaster, Atlanta, Ga.

Shears (iron).—See "Cutting Machinery."
Siding.—C. F. Monroe, Heneta Bone Co., Flemington, W. Va., wants corrugated siding.

Sprocket Chains.—Glover Machine Works, Marietta, Ga., is in the market for sprocket chains for motor cycles.

Standpipe.—Sealed bids will be received by Henry Zimmerman, City Secretary, Sherman, Texas, until July 1 for taking down a 20x130-foot steel standpipe, also for sale of said pipe as it now stands (last proposition preferable). Full description of pipe may be had upon application to the City Secretary; usual rights reserved; C. E. Craycroft, Mayor.

Steam Shovel.—Rome Furnace Co., Chattanooga, Tenn., in market for small-size steam shovel; second-hand Thew preferred.

Structural Steel.—See "Building Materials."

Sugar Machinery.—A. Karim Khan & Bro., Nihitor, District Bijnore, Cawnpore, India, want information and prices on cane-juice evaporators; vacuum pans, one ton per strike, heating surface 55-50; open pans—Teaches, Witzel, Fletcher, etc.; centrifugal sheets finer than 0.25 by 8.00 millimeters, sheet being 8 feet by 14 inches; best filters for juice.

Tank and Trestle.—Separate sealed proposals will be received until June 15 for construction of 150,000-gallon steel tank and trestle at Fort Dade, Ala. Information on application. United States reserves usual rights; Capt. M. H. Barry, Constructing Quartermaster.

Traction Engine.—Henry Olmstead, Jr., vice-president Stanton Development Co., Freeport Bank Building, Freeport, L. I., N. Y., wants prices on 20-horse-power gasoline traction engine, new or second-hand, in good condition.

Tramways (Aerial).—See "Cable-conveying Equipments."

Tunnel Construction.—Sealed bids will be received until June 15 for constructing highway tunnel about 700 feet long under Mission Ridge, near Chattanooga, Tenn.; usual rights reserved. Each bidder will be required to furnish certified check for \$1000. Bids will be opened in office of W. L. Dodds, County Engineer, to whom application can be made for details and specifications.

Typewriters.—A. Karim Khan & Bro., Nihitor, District Bijnore, Cawnpore, India, want prices and information on typewriters worked by keyboard; less than 3/4% in price. Price is to be f. o. b. Calcutta.

Water Mains.—City of Greenville, Texas, wants several thousand feet of six-inch water mains; Joseph F. Nichols, Mayor.

Water-works.—Sealed bids for construction of water-works at Eunice, La., will be received by Mayor and Board of Aldermen until July 15. Proposals should be addressed to O. E. Vidrine, Mayor, and must be accompanied by certified check of \$500 payable to the Mayor; usual rights reserved. Plans may be seen at Mayor's office or at office of Ira W. Sylvester, consulting engineer, Alexandria, La. For copies of specifications and other information address the Mayor.

Water-works Equipment.—See "Filter Plant" and "Sedimentation Tank."

Water-works.—City of Jellico, Tenn., R. B. Baird, Mayor, is prepared to correspond with engineers and contracting companies relative to construction of water-works—general plan, estimates, plans, etc.

Water-works.—Sealed proposals for constructing water-works and sewerage system and for improvements to electric plant for Madison, Ga., will be received until June 6. Bidders must use printed forms and address proposals to Col. E. W. Butler, Mayor. Water-works will consist of 100,000-gallon reservoir, two compound duplex pumps of 500,000-gallon capacity, two centrifugal pumps, one of 200 and other of 300-gallon capacity per minute, driven by two alternating-current motors; 125-horse-power boiler, five and one-half miles of water mains, sizes from 4-inch to 10-inch. Sewerage items: Five and one-half miles of sewer, sizes from 6-inch to 12-inch, in cuts from 0 to 18 feet. Electric items: 100-kilowatt, 60-cycle, three-phase, 2300-volt alternator and 125-horse-power plain slide-valve engine. Proposals will be received, first, for furnishing material and constructing different systems or any part thereof; second, to furnish labor and constructing system or any subdivision thereof, city furnishing all material. Each proposal must be accompanied by certified check for amount equal to 5 per cent. of bid. Bond of 25 per cent. of contract price will be required. Plans on file at office of Col. E. W. Butler, Mayor, Madison, and E. H. Davis, consulting engineer, Griffin, Ga.; usual rights reserved.

Water-works.—Bids will be received by Mayor and City Council of Nacogdoches, Texas, until June 3 for purchase of all pipe, hydrants, valves and boilers required in extension of present water system. Specifications can be obtained from O'Neill Engineering Co., Dallas, Texas.

Water-works.—Sealed bids will be received by Mayor and City Council, Comanche, I. T., until May 28 for purchase of all pipe, hydrants, valves, boilers, feed-water heaters, pumps, boiler-feed pumps, cement and all other material required in construction of complete system of water-works. Specifications can be had by addressing O'Neill Engineering Co., Dallas, Texas.

Well Drills.—See "Drilling Machinery."

Wireworking Machinery.—See "Fence Machine."

Woodworking Machinery.—See "Flooring Machinery."

Woodworking Machinery.—See "Furniture Machinery."

Woodworking Machinery.—Gibbes Machinery Co., 804 West Gervais street, Columbia, S. C., in market for light self-feed jointer for rapid handling of ordinary table stock.

Woodworking Machinery.—Le Roy S. Davidson, Kershaw, S. C., in the market for complete planer machinery.

Woodworking Machinery.—Atlantic Wagon & Vehicle Co., Rose Hill, N. C., wants wood-working machinery for use in manufacturing wagons, carts and buggies.

Woodworking Machinery.—Ford Osborn Lumber & Mill Co., Cleburne, Texas, will be in the market for a few woodworking machines.

Woodworking Machinery.—Wanted—Wood planer and matcher to dress four sides 6x12 and to make flooring and ceiling. Address Peacock's Iron Works, Selma, Ala.

INDUSTRIAL NEWS OF INTEREST

Messrs. Jos. R. Ives & Co.

In referring last week to water-front lands for sale an error was made in the name of the firm offering the properties. Messrs. Joseph R. Ives & Co. is the correct title; address, Norfolk, Va.

Kaolin Properties for Sale.

The Sterling Kaolin Co., Alken, S. C., offers for sale its kaolin property of 130 acres, large sheds and machinery near Warrenville, S. C. Full particulars furnished to applicants acting with a view of buying. A public sale will be held on June 3.

Iron Works for Sale.

The plant formerly known as the Atlantic Iron Works at Baltimore will be offered for sale at auction on June 3. This property includes site, buildings, machine and boiler shop, etc. Catalogue giving details is now ready. Address Pattison & Gahan, auctioneers, Baltimore, Md.

To Use Peck-Hammond System.

It is of interest to note that the Peck-Hammond Company of Cincinnati, Ohio, will manufacture the heating and ventilating equipment for the \$25,000 school building to be erected at Moss Point, Miss. The Peck-Hammond fan-furnace system of warm-air heating will be installed.

To Furnish Cement for Dam.

Cement for the Reedy river dam will be furnished by a Southern company. It will comprise 50,000 bags, and the contract has been awarded to the Carolina Portland Cement Co. of Charleston, S. C. This cement will be used by the Reedy River Power Co. of Laurens, S. C., in the construction of a 38x450-foot dam to develop water-power.

Cyclone Drills in South America.

Mr. J. C. Evans of Youngstown, Ohio, has returned from Zaragoza, South America, where he has been operating Cyclone drills, prospecting a placer property for the South American Development Co. The results were highly satisfactory, and it is rumored that a dredge will be installed. The drills are manufactured by the Cyclone Drill Co. of Orrville, Ohio.

Alabama Coking Coal.

Coal-bearing lands in the Warrior river coal fields, Jefferson county, Alabama, are offered for sale by Messrs. John Sweet & Son, Birmingham, Ala. They are now desirous of selling 12,000 acres located on main line of Southern Railway, 18 miles from Birmingham. This tract is said to contain several good veins of coking and steam coal for drift mining. Inquiries for particulars are invited.

MISCELLANEOUS WANTS NOT OTHERWISE CLASSIFIED.

Bottles.—Old Dominion Brewing & Ice Co., Newport News, Va., in market for crown-finished bottles.

Building Plans.—School trustees, M. S. Connor, secretary, St. Georges, S. C., want plans and specifications for building to cost \$8000 to \$10,000.

Furniture.—Board of Public Instruction of Duval county, Jacksonville, Fla., wants by June 6 description and prices on seating (for 500 to 600) with chair desks, adjustable or stationary, and on opera chairs, with adjustable arms for seating, for 250 persons. Address H. H. Palmer, county superintendent.

Lumber.—W. A. Lillier, Keyser, W. Va., wants prices on 2x8, 10x12 and 3x12 joists; also framing timbers for same from 12 to 24 feet long of prime long-leaf pine, thoroughly seasoned.

Mirrors.—Savery & Love, Box 34, Talladega, Ala., wants a lot of bevel-plate mirrors for mantels, furniture, etc.

Pasteurizer.—Old Dominion Brewing & Ice Co., Newport News, Va., in market for a pasteurizer.

Sausage Machinery.—J. Cabeza, Camera Oficial, Comercio, Industria y Navegacion, Oviedo, Spain, wants catalogues and prices on machinery for tying sausages and puddings.

Schoolroom Furniture.—M. S. Connor, secretary School Trustees, St. Georges, S. C., wants schoolroom furniture.

Statuary and Fountains.—Welch Furniture Co., High Point, N. C., wants addresses of manufacturers of statuary and fountains for lawns.

Stone Work.—W. A. Lillier, Keyser, W. Va., wants prices on about 6000 cubic feet limestone or Ohio sandstone, cut ready to set.

Virginia Lands on Market.

Among Virginia lands on the market is a tract of 5000 acres in Wythe county. The property includes timber estimated to cut 5,000,000 feet, 75,000 railroad ties, 3000 cords of chestnut oak bark, etc. One thousand acres is in grass and level. Full details can be obtained by addressing J. M. Venable, Candier Building, Atlanta, Ga., who will sell at a low price to a quick buyer.

Broderick & Bascom in New York.

Owing to increasing demands for its products in New York and vicinity the Broderick & Bascom Rope Co. of St. Louis, Mo., has obtained larger offices at 76 Warren street, New York city. In the new location the company will be better prepared to supply the demand for its wire-rope and aerial wire-rope tramways and surface and underground wire-rope haulage outfits.

Pittsburg Vise Exhibit.

The Pittsburg (Pa.) Automatic Vise & Tool Co. has completed plans for exhibiting at the convention of Master Car Builders and Master Mechanics at Atlantic City June 13-20. It will show what is claimed to be the largest vise ever constructed. The tool will be operated by electricity, the double-swivel movement being visible at all times. It weighs 635 pounds and has a jaw opening of 15 inches. Of this special-type tool the company reports a very heavy demand.

Establishes Engineering Offices.

An addition to Southern civil engineering offices is seen in the announcement of O. G. Joseph, 1501 and 1552 Lincoln Savings Bank Building, Louisville, Ky. Mr. Joseph has been connected with various architects, railroad and bridge companies in the capacity of engineer, and designed and supervised some large buildings, bridges, foundations and engineering work in the Louisville and other sections. He is prepared to receive catalogues and other literature pertaining to his work.

Another Gilbreth Contract.

One of the most recent contracts announced by the Frank B. Gilbreth organization calls for the erection of a new factory building for the H. C. White Company, stereoscopes and stereographs, North Bennington, Vt. This building will be erected under the Gilbreth "cost-plus-a-fixed-sum" contract. It will have brick walls, with concrete floors, beams, roofs, girders and columns; cost approximately \$35,000. The engineer is W. F. Dean of Boston.

Automatic Thin Place Preventer.

Devices and improvements are constantly being made to textile machinery looking to

the turning out of better products and overcoming defects in materials being made. Such a device as this is the automatic thin-place preventer, designed to prevent the occurrence of thin places of any kind in textile fabrics. In order to demonstrate to textile manufacturers the claims for this device the Clayton & Bentley Company, 711 Prudential Building, Atlanta, Ga., will equip a few looms in any factory so that the device can be judged on its merits by actual operation. In a little pamphlet entitled "Opportunity" this thin-place preventer is fully described. It and any other information desired concerning the device will be furnished upon application.

Fox Machine Company.

The Fox Machine Co. of Grand Rapids, Mich., has received an order for two No. 8 F Fox trimmers, the largest-sized trimmers, and 20 small No. 4 A Fox trimmers for installation at the Pennsylvania General Electric Co.'s Stearns plant, Erie, Pa. The demand for Fox trimmers is so heavy that, whereas it is customary to carry several hundred of these machines in stock for immediate delivery, at the present time orders are being received for the machines faster than they can be crowded through the works. The re-design of these machines a short time ago has apparently added very materially to the sale, and trimmer users are showing a disposition to give this class of equipment the attention which it has always deserved but often failed to receive.

Ordering Water-Softening Plants.

After continued success with the We-Fu-Go water-softening and purifying systems, the Illinois Central Railroad has just placed with the Wm. B. Scaife & Sons Company of Pittsburg, Pa., the eighth and ninth contracts for We-Fu-Go water-softening and purifying systems, a 300,000-gallon-per-day plant for Manchester, Iowa, and a 400,000-gallon-per-day plant for Waterloo, Iowa. Among some of the recent orders placed for We-Fu-Go and Scaife water-softening and purifying systems are the American Steel & Wire Co., Donora, Pa., 12,500-horse-power We-Fu-Go system; American Sheet & Tin Plate Co., Cambridge, Ohio, 1900-horse-power We-Fu-Go system (17th contract); Woodward Iron Co., Woodward, Ala., a 10,800-horse-power We-Fu-Go system; Minneapolis, St. Paul & Sault Ste. Marie Railroad Co., a 250,000-gallon-per-day We-Fu-Go continuous system; Coshocton Straw Paper Co., a 500-horse-power Scaife system.

Townsites in Missouri.

The Mon-Ark Townsite Co. will have charge of and be the proprietor of four townsites on the Missouri and North Arkansas Railroad in Missouri, between Neosho and Seligman. Parvenu, 12 miles east of Neosho, in a fine prairie and surrounded by well-improved farms, and should make a town of 600 to 1000 people during the next year. Fairview, near east end of Newton county, in a fine fruit and farming country, elevation 1269 feet above sea level; this will make a 2000-inhabitant town. Wheaton, in the edge of Barry county, is in the wheat district, and is an excellent site for mills and elevators. Ridgely, on the divide between Shoal and Sugar creeks, has an elevation of 1550 feet above the sea, and is in one of the best fruit districts. Fruit evaporators, elevators, sawmills and milling machinery will be in demand, and mining machinery and milling machinery will be in demand at Parvenu and Fairview. These towns will be platted and placed on the market during June. Truman Elmore is president of the Mon-Ark Townsite Co.

Enlarging Its Plant.

The General Fireproofing Co. has about completed additions to its plant at Youngstown, Ohio, which will double the capacity of the "Allsteel" furniture factory and provide for the lug-bar and girder-frame departments as complete an equipment as has been possessed for some years past by the "Herringbone" expanded steel lath and expanded metal shops. For the manufacture of pin-connected girder frames a shop 85x200 feet has been erected, with a railroad spur running through the entire length of the building. Adjoining the girder-frame shop is the steel yard, piled high with stock lengths of cold-twisted lug bars and the square bars used in fabricating the girder frames. This bar yard is covered by an electric crane 320 feet long, having 100 feet span, which has just been erected and which, because of its unusual size, excites great interest. To accommodate the steady growth of the "Allsteel" furniture department a reinforced concrete building 60x180 feet, two stories, has been erected adjoining the old factory. By use of pin-connected girder frames, beams and girders of the same depth

are provided, which greatly facilitates hanging shafting. The office building has been enlarged to accommodate the reinforced concrete department by the erection of a two-story-and-basement addition 36x73 feet, connected with the former office by a wing 36x36 feet. Cement plaster applied over "Herringbone" expanded steel lath is used for the exterior finish, and instead of woodwork in the addition, "Alsteel" baseboards, moldings, window and door casings and doors, finished like mahogany, have been used. In fireproofing the structure art is not sacrificed to utility. So closely the rich color and beautiful grain of the wood are reproduced that it is difficult to believe that the effect has been obtained on steel.

General Electric Elections.

The annual meeting of the General Electric Co. was held May 14 at Schenectady, N. Y. These directors were elected: Messrs. Gordon Abbott, Oliver Ames, T. Jefferson Coolidge, Jr., Frederick P. Fish, George L. Gardner, Henry L. Higginson, Robert Treat Paine 2d, all of Boston; C. L. Coffin, J. Pierpont Morgan, S. L. Schoonmaker, Charles Steele, all of New York; W. M. Crane of Dalton, Mass.; Marsden J. Perry of Providence, R. I.; J. P. Ord of Albany and E. W. Rice, Jr., of Schenectady. On May 15 at the directors' meeting in New York the following officers were elected: C. A. Coffin, president; A. W. Burchard, assistant to the president; E. W. Rice, Hinsdill Parsons, B. E. Sunny and J. R. Lovejoy, vice-presidents; M. F. Westover, secretary; H. W. Darling, treasurer and assistant secretary; I. S. Keeler, second assistant secretary; H. P. Schuyler, assistant treasurer; Ed Clark, general auditor; John Riley and S. L. Whitestone, assistant general auditors. The duties of the various vice-presidents remain the same as before the election.

C.-W. Motors in a Rolling Mill.

The order for 150,000 tons of steel rails placed by the Harriman lines with the Tennessee Coal & Iron Co. of Birmingham, Ala., has been followed by the Tennessee Coal & Iron Co. ordering from the Crocker-Wheeler Company of Ampere, N. J., a complete electric-motor equipment of its new steel rail. The Crocker-Wheeler Company has recently been obliged to open an office in Birmingham to handle its rapidly-increasing business in that section. The order mentioned includes 15 Crocker-Wheeler Form W rolling-mill motors. The line of Form W motors is designed for the arduous service of rolling mills, and has attracted very favorable attention in the steel world for its ruggedness and simplicity of design. The order aggregates about 575 horse-power. Among other purchasers and users of Form W rolling-mill motors are Alliance Machine Co., Bethlehem Steel Co., Carnegie Steel Co., Illinois Steel Co., Lorain Steel Co., Mineral Point Zinc Co., Morgan Engine Co., National Tube Co., Pennsylvania Steel Co., Shelby Steel Tube Co., Tennessee Coal, Iron & Railroad Co., United Engine & Foundry Co. and Youngstown Sheet & Tube Co.

To Offer Improved Boilers.

The McCrum-Howell Company, manufacturer of "Richmond" boilers and hot-air furnaces, "Uniontown" radiators and "Penn" enameled ware, 46 and 48 East 20th street, New York, is about to place on the market its new line of improved "Richmond" sectional boilers and improved "Richmond" round boilers for steam and hot-water heating. These boilers are from designs and models furnished by the patentee, William M. Mackay, past president and now secretary of American Society of Heating and Ventilating Engineers. The McCrum-Howell Company has secured the exclusive services of Mr. Mackay in an advisory capacity in connection with the designing and building of house-heating boilers and radiators. These new models are the result of nearly 40 years of development in the manufacture of house-heating boilers, and as Mr. Mackay during that period has designed, patented and marketed many of the leading constructions, it may be expected that the improved "Richmond" boilers will combine the most salient points of his experience. Experiments and tests at the company's plant have convinced the company that it has a boiler in advance of any similar type of boiler construction. Provision has been made for a larger grate and fire surface and a larger space for a fuller combustion of gases. The experiments showed that when excessive heating surface is cut out, the large clear space that it leaves above the fuel more than compensates for the excessive surface which has been removed, and it has been found that with a good clear space in which the flames can play and the gases be ignited, the boiler will do better work than it did before. The new improved "Richmond"

sectional boiler is of the water-leg base, screw-nipple type, besides many other improved features. The boilers contain some interior modifications which make them specially adapted to burning either hard or soft coal, coke or wood. The large area of direct water heating surface, which is provided in both types and which is exposed at all times to the consuming gases, gives excellent results, as the flames of the heated gases come in close touch with and envelope the overhanging fire surface. The combustion products are thrown up into and through the flues and pass to the outlet at the rear of the boiler at a low temperature as in the older type of "Richmond" boiler. Literature descriptive of the new boilers is being prepared.

The Dr. Austen Chemical Facilities.

Manufacturers and others who may at any time find need for expert chemical advice and reports are invited to confer with Dr. Peter T. Austen, F. C. S., consulting chemist, 89 Pine street, New York. Dr. Austen has had 20 years' successful experience with leading manufacturers, and refers to his work is somewhat different from that of the usual chemist. He says: "I examine, test and study manufacturing processes and products at works and in my laboratories in order to demonstrate how they may be improved and made more efficient. This work usually consists in eliminating or minimizing technical difficulties, remedying defects in processes, increasing yield of products, preventing uneven or varying yields, improving operating detail, inventing new processes and products, decreasing operating costs, overcoming inefficiencies in mechanical appliances, reducing time of operating, improving quality of products (crystal, color, odor, durability, etc.), removing impurities from products and bringing them up to best standards, stopping losses and little profit leaks, reducing the production of wastes, by-products or "mucks," utilizing wastes, finding new uses for articles, purifying and softening water, preventing scaling, pitting, corrosion, etc., of boilers, preventing loss of heat through poor construction, lack of proper insulation, etc., utilizing waste heat in steam, gases and liquids, and applying the most modern knowledge and experience in chemical engineering." In mentioning his other facilities Dr. Austen includes giving technical advice about processes and products and other matters connected with manufacturing chemistry and investment in chemical enterprises, patents, inventions, etc.; making experimental investigations of all kinds of chemical problems (research work); practicalizing the wants and ideas of manufacturers; testing, criticising and reporting on new processes, patents, formulas and inventions that are offered to manufacturers; presenting to manufacturers for their consideration new processes, products, patents, etc., that are submitted for introduction and disposal by inventors at home and abroad; keeping manufacturers informed as to the progress of art and science relating to their interests as appearing in scientific and technical journals, patent reports, etc., and acting as technical adviser and expert chemical director under retainer by the year, visiting the works regularly, making an exhaustive study of the plant and conditions of manufacturing, and bringing the manufacture up to the highest standard of economy and productiveness at the lowest operating cost in the shortest time, and so maintaining it.

TRADE LITERATURE.

As to Electric Storage Batteries.

Recent literature on the subject of electric storage batteries is the pamphlet now being distributed by the Electric Storage Battery Co. of Philadelphia, Pa. This pamphlet tells about the "Exide" battery, giving the necessary facts and figures, together with tables, of interest to people concerned with the use of electric storage batteries of the latest improved types. The company previously acquired patents and manufacturing rights for the important types of storage batteries, and offers to purchase a complete line of electric equipment of this character. Consult with the company as to the extent to which the storage battery is now being utilized in the industrial world.

Directory of Louisiana Sugar Industry

People who are interested in having at hand a complete compendium of the Louisiana sugar industry will find valuable data in the Directory of Louisiana Sugar Planters for 1907. This publication presents the names and addresses of all those who manufacture sugar and the larger operators who only grow cane. The addresses and parishes are alphabetically arranged so that any information of this character needed can be

readily found. Included in the data is the system used by the different manufacturers in producing sugar, molasses and syrup. The directory is published by the Sugar Planters' Journal of New Orleans, La., and the price is \$1 per copy.

To Lay Rex Flintkote Roofing.

How to lay Rex Flintkote roofing is the principal subject discussed in The Ridgepole for May. A careful description is presented of the best way to lay this well-known roofing material, the data having been suggested by questions which are frequently referred to the salesman by the customer, as well as by the questions which arise otherwise, including those pertaining to tight roofs, repairs, repainting, etc. Those who are interested in plans for new buildings of any kind, whether as architects, contractors or owners, will find this information of value to them. Messrs. J. A. & W. Bird & Co., 34 India street, Boston, Mass., issue The Ridgepole. They manufacture the Rex Flintkote roofing, which is used all over the world.

Industrial Opportunities.

There has been published recently by the industrial department of the Rock Island-Frisco lines a 160-page book called "Opportunities," which can be of great service to any manufacturer or business man in search of another location. This book contains a concise description of each town and city along the 13,500 miles of railroad embraced in the Rock Island, Frisco and Chicago & Eastern Illinois lines, and in parallel columns on the same page with the description of the community is given a list of the existing openings for business houses, factories, mills and industries of various kinds. Many new towns and cities have been located along the large number of newly-constructed lines of the Rock Island-Frisco, and particularly in these communities do good opportunities exist. Address M. Schultze, Industrial Commissioner, Rock Island-Frisco Lines, St. Louis, Mo.

New J. R. Alsing Publications.

The J. R. Alsing Company has completed the compilation of Catalogue A and Catalogue B. Catalogue A is already finished, and Catalogue B is in the hands of the printer. In Catalogue A the J. R. Alsing Company gives an illustrated description of a large number of different styles of machines, which are suitable to reduce anything, and therefore useful to all industries wherever materials have to be reduced. It further treats of what is required to dry materials, and refers to the company as building driers to suit all requirements. Catalogue B contains illustrated descriptions of such special machines as are used for the reduction of all kinds of ores and minerals, and forms a special issue for the cement trade, the mining industry and general grinders of minerals. Address the J. R. Alsing Company, 136 Liberty street, New York, for copies of the new publications.

Recent Concrete-Block Literature.

Recent publications on the subject of concrete blocks and other products include the complete primary catalogue of the Ideal Concrete Machinery Co., the well-known manufacturer of the face-down horizontal-core machine. The information presented is of timely interest in view of the increasing demand for concrete blocks for building purposes and for other articles made of concrete and used in construction work. It comprises general data in reference to the various avenues of building in which concrete products are being used, tables of value, reports of tests, and other information which the present and prospective concrete manufacturer should have before him for consideration. Additional data is the description of the Ideal machines and their products and their superior features. The Ideal Concrete Machinery Co. of South Bend, Ind., is the manufacturer of the machines referred to and will send copy of the catalogue.

Texas and Fort Worth.

Texas is a land of opportunity. It is in the infancy of its development and presents advantages for capital, energy, skill and enterprise not found in States where development has reached its maximum. People from all sections of the country are constantly locating in Texas to engage in manufacturing, mercantile, agricultural and other pursuits, and there is plenty of room for many millions more. The facts about Texas, and especially the city of Fort Worth and its surrounding territory, are ably presented in an illustrated pamphlet which the Fort Worth Board of Trade is now distributing. This publication contains many photographic views of interest and considerable data as a means of guidance for those seeking informa-

tion as to the best locations in the Southwest for any kind of enterprise. It is stated that fully 10,000 people have been added to Fort Worth's population during the past year, making the total now 70,000. Transportation facilities are abundant, and many important industrial plants are now being operated, including the big packing plants of the Armour and Swift companies. These cover 21 acres of land. The Fort Worth Board of Trade wants to send a copy of its pamphlet to everyone interested, and invites requests for a copy.

Economy of Feed-Water Heating.

It is not necessary nowadays to discuss the subject of the economy of feed-water heating, as the method is recognized as one that steam users need to adopt in order to obtain the greatest efficiency from their plants. But an important question as to feed-water heaters is what type of equipment shall be ordered. To determine this an aid is presented in an illustrated publication issued by the Marion Incline Filter & Heater Co. of Marion, Ohio. The publication enters into the heater question sufficiently to present the real problem before the reader and then show just how the difficulties can be avoided and the best possible results obtained. In connection with this information there is presented a complete description of the feed-water heaters and other apparatus manufactured by the Marion company. These manufactures include heaters and receivers, chemical reagent systems, incline filters and sediment deflectors, steam and oil separators and steam traps. Photographic views and diagrams assist in elucidating the test. No steam user not conversant with this class of information thinking of building a new plant or providing betterments for one already in existence should fail to read the Marion publication. Write the company asking for a copy of Catalogue G-1.

Modern Practice in Air Compression.

A new publication, entitled "Modern Practice in Air Compression," says: "To meet the increased demand for compressed air, particularly in the mining field, but also in the quarrying, general contracting and manufacturing industries, the Sullivan air compressors were placed on the market several years ago. They were built after years of experience in the manufacture and use of mining and quarrying machinery operated by compressed air and after the most thorough study of all details of design and construction. The aim of the company is to build not the cheapest machines, from the standpoint of price, but those which will, in the long run, prove to be the most economical, embodying the best materials, the most careful construction and the latest designs approved by modern engineering practice. As a result the Sullivan compressors perform their duty in a proper and successful manner. A policy of constant advancement is maintained, and improvements are adopted as rapidly as their value is demonstrated or as conditions and requirements demand. The machines are made as mechanically perfect as possible, regardless of expense, and all parts, being made to fits and templates, are perfectly interchangeable. New shops have recently been erected to give proper attention to the widening scope of this branch of manufacture, and orders for standard sizes are filled promptly. Correspondence relating to compressors will receive prompt attention, and when desired a representative of the company will advise personally with the prospective purchaser as to the best manner of meeting the conditions of the individual proposition." The Sullivan Machinery Co., manufacturer of the machinery referred to and publisher of the pamphlet, has its main offices at Chicago, Ill.

Preserves Wood Against Decay.

Those who are interested in the preservation of wood against decay will find data as to the ways and means in a pamphlet now ready for distribution. This publication tells of the successful results attained in the use of Avenarius Carbolineum. The method of preserving wood with this invention consists of deeply impregnating the wood with a self-impregnating oil of heavy specific gravity, which, on account of its chemical ingredients, will most effectually prevent rot, dry rot and decay. In explaining what the oil is, the Carbolineum Wood Preserving Co. says: "Avenarius Carbolineum is a heavy oil for superficial treatment. It possesses antiseptic ingredients that will thoroughly neutralize the rot-producing elements or germs contained in the wood structure, while its fatty oils seal up the pores on the outside and prevent any further germs from entering the wood under any exposure. It is insoluble in water and self-impregnating. It is and remains liquid and ready for imme-

date use, and can be kept on hand any length of time without detriment to quality or loss through evaporation. Prevents checking and warping of wood. Waterproofs ropes, nets and tarpaulins and keeps them soft and pliable in the coldest weather. Prevents the attack on woodwork of rats, mice, white ants and other wood-destroying insects. No special skill nor expensive workmen nor complicated machinery is required to use it. A common paint brush in the hands of an ordinary laborer is all that is required. Even that can be dispensed with by dipping the wood into the liquid, which is the best way when large lots of lumber are to be treated. Lapping is all that is required even for ties, the length of time which the wood is to be immersed varying according to the size of the timber and the use to be made of same. Many apply it rapidly and successfully with spraying machines. Avarius Carbolineum has great covering capacity. One gallon covers 350 square feet on dressed lumber, 250 square feet on rough lumber, 100 square feet on shingle roof. This is required for one coat; the second coat requires about one-fourth the quantity for the first coat. When the wood is to be immersed the covering capacity is about one-third to one-half less because of the heavier impregnation."

Utilizing the Wastes.

[Boston (Mass.) Herald.]

The man at North Adams who keeps the public dump has a salary of 50 cents a week and what he can find among the refuse. He often clears \$30 or more a week. This is because there are so often thrown away as valueless things which have a value—brass, metals of all kinds, rags, old rubbers and coal, for example.

This brings to mind the long list of useful articles produced now from what was once the waste of factories, and leads to the query whether the uses of waste are even yet fully exhausted. Under forced draught family waste, such as coffee grounds, scraps of bread, egg shells, all that is commonly known as garbage, is highly inflammable. The quantity produced by the hotels must be enormous.

There is likewise all the waste paper, sticks, boxes and wrappers which are carted daily from the great stores—under proper conditions very easily converted into electricity for light or power. It may easily be that the man at North Adams is merely doing in a very small way what the city itself, and particularly our large cities, should do on an extended scale. It has been done with good results in a restricted area in New York.

A dispatch from Amarillo, Texas, says that an automobile line with six touring cars in service has been established between that place and Tucumcari, N. M., 115 miles, and the run is made in seven or eight hours.

FINANCIAL NEWS

The MANUFACTURERS' RECORD invites information about Southern financial matters, items of news about new institutions, dividends declared, securities to be issued, openings for new banks, and general discussions of financial subjects bearing upon Southern matters.

Review of the Baltimore Market.

Office MANUFACTURERS' RECORD,
Baltimore, Md., May 22.

The Baltimore stock market continues dull and without particular interest. In the trading during the past week United Railways common, trust certificates, sold at 12½; the income bonds from 54% to 53½; the funding 5s from 83% to 83½; the funding scrip at 83; United 4s from 87 to 86½; Consolidated Gas 5s, 100 to 109¼; do. 6s, 104½; Seaboard 4s, 73½ to 72½, last sale at 73; Mt. Vernon-Woodberry Cotton Duck 5s from 80¼ to 79¾; G.B.-S. Brewing common, 4½ to

5; the income bonds from 21¼ to 22%; the 1sts from 52% to 53.

Union Bank sold at 120; Third National, 109 to 108¾; Mechanics' Bank, 26; Maryland Casualty, 60½ to 61; United States Fidelity, 112; Fidelity & Deposit, 132½.

Other securities sold as follows: Houston Oil common, 7% to 8%; Baltimore City 3½s, 1930, 101½ to 101; Northern Central Railway stock, 93 to 90¼; do. fractions, 93 to 90½; Merchants & Miners' Transportation Co., voting trust, 83½ to 82½; Atlantic Coast Line 4s, 94% to 95; do. new 4s, certificates, 83; Atlantic Coast Line of South Carolina 4s, 90; Western Maryland 4s, 75% to 74¾; North Carolina 4s, 101¼; Consolidation Coal, 89; Georgia & Alabama 5s, 107 to 106½; Baltimore, Sparrows Point & Chesapeake 4½s, 94½; City & Suburban (Washington) 5s, 101½; Macon Railway & Light 5s, 94½; Norfolk Railway & Light 5s, 95¼ to 95½; Petersburg A 5s, 109½; Carolina Central 4s, 93; Florida Southern 4s, 91¾; Virginia Midland 4ths, 107; do. 5ths, 107; Baltimore Electric Power 5s, 90; Anacostia & Potomac 5s, 100¼ to 100; Detroit United 4½s, 86; West Virginia Central 6s, 105¼.

SECURITIES AT BALTIMORE.

Last Quotations for the Week Ended
May 22, 1907.

| Railroad Stocks. | Par. | Bid. | Asked. |
|-----------------------------------|------|------|--------|
| Atlantic Coast..... | 100 | 100 | 101 |
| Georgia Southern & Florida..... | 100 | 24 | 30 |
| Georgia, Sou. & Fla. 2d Pfd..... | 100 | 72½ | 73 |
| Maryland Electric..... | 100 | 33½ | 34 |
| Seaboard Company Common..... | 100 | 19 | 20 |
| Seaboard Company 1st Pfd..... | 100 | 66 | 67 |
| United Railways & Electric Co. 50 | 12 | 12½ | 13 |

| Bank Stocks. | Par. | Bid. | Asked. |
|---------------------------------|------|------|--------|
| Citizens' National Bank..... | 10 | 30½ | 31 |
| Commer. & Farm. Blue Cfs..... | 100 | 127½ | 128 |
| Drovers & Mech. Natl. Bank..... | 100 | 240 | 250 |
| Maryland Natl. Bank..... | 20 | 19¼ | 20 |
| Merchants' National Bank..... | 100 | 173½ | 175 |
| National Bank of Baltimore..... | 100 | 115 | 116 |
| National Bank of Commerce..... | 15 | 26 | 27 |
| National Howard Bank..... | 10 | 12½ | 13 |
| National Marine Bank..... | 30 | 37½ | 39 |
| National Mechanics' Bank..... | 10 | 26 | 27 |
| National Union Bank of Md..... | 100 | 119 | 122 |
| Third National Bank..... | 100 | 108 | 109½ |
| Western National Bank..... | 20 | 35 | 36 |

| Trust, Fidelity and Casualty Stocks. | Par. | Bid. | Asked. |
|--------------------------------------|------|------|--------|
| Fidelity & Deposit..... | 50 | 133 | 134 |
| Maryland Casualty..... | 25 | 61 | 62 |
| Maryland Trust..... | 100 | 71½ | 72 |
| Mercantile Trust & Deposit..... | 50 | 123 | 124 |
| Union Trust..... | 50 | 68 | 69 |

| Miscellaneous Stocks. | Par. | Bid. | Asked. |
|------------------------------------|------|------|--------|
| Con. Cotton Duck Common..... | 50 | 10 | 11¼ |
| Con. Cotton Duck Pfd..... | 50 | 32 | 33 |
| Con. Gas, Elec. Lt. & P. Com..... | 50 | 35 | 36 |
| Consolidation Coal..... | 100 | 90 | 91 |
| G.B.-S. Brewing Co..... | 100 | 4 | 5 |
| Mer. & Miners' Trans. Co. Cfs..... | 100 | 80 | 81 |

| Railroad Bonds. | Par. | Bid. | Asked. |
|--|------|------|--------|
| Albany & Northern 5s, 1946..... | 95 | 95 | 96 |
| Atlanta & Charlotte Extn. 4½s..... | 100 | 94 | 95 |
| Atlantic Coast Line 1st 4s, 1963..... | 94½ | 95½ | 96 |
| Atlantic Coast Line 4s, Cfs, 1962..... | 83 | 83 | 84 |
| Atlan. Coast Line (Cts.) 4s..... | 89½ | 89½ | 90 |
| Carolina Central 4s, 1945..... | 92¼ | 92¼ | 93 |
| Columbia & Greenville 1st 6s, 1916..... | 114 | 114 | 115 |
| Florida Southern 4s, 1940..... | 91½ | 91½ | 92 |
| Georgia & Alabama 5s, 1945..... | 107 | 107¼ | 108 |
| Georgia, Car. & North. 1st 5s, 1929..... | 106 | 107½ | 108 |
| Georgia Pacific 1st 6s, 1922..... | 116 | 116 | 117 |
| Georgia Sou. & Fla. 1st 5s, 1945..... | 109¼ | 109¼ | 110 |
| Maryland & Pennsylvania 4s, 1951..... | 92 | 92 | 93 |
| Petersburg, Class A 5s, 1925..... | 109¼ | 110 | 111 |
| Petersburg, Class B 6s, 1925..... | 122 | 122 | 123 |
| Savannah, Fla. & West. 6s..... | 127 | 127 | 128 |
| Seaboard Air Line 4s, 1950..... | 72¾ | 73 | 74 |
| Seaboard Air Line 5s, 10-year, 1911..... | 97 | 97 | 98 |
| South Bound 5s, 1941..... | 108¼ | 108¼ | 109 |
| Virginia Midland 5th 5s, 1925..... | 107½ | 107½ | 108 |
| Washington Terminal 3½s..... | 90 | 90 | 91 |
| Western Maryland new 4s, 1962..... | 74¾ | 75 | 76 |
| Western North Car. Co. 6s, 1914..... | 109¼ | 109¼ | 110 |
| West Virginia Cen. 1st 6s, 1911..... | 106 | 106½ | 107 |

| Street Railway Bonds. | Par. | Bid. | Asked. |
|--|------|------|--------|
| Anacostia & Potomac 5s, 1949..... | 99½ | 100½ | 101 |
| Atlanta Con. St. Rwy. 5s..... | 101 | 101 | 102 |
| Baltimore City Passenger 5s, 1911..... | 100½ | 100½ | 101 |
| Baltimore Traction 1st 5s, 1929..... | 101 | 101½ | 102 |
| Charleston City Railway 5s, 1923..... | 103 | 103 | 104 |
| City & Suburban 5s (Wash.), 1948..... | 101¼ | 101¼ | 102 |
| Macon Ry. & Lt. 1st Con. 5s, 1953..... | 94 | 96 | 97 |
| Norfolk Railway & Light 5s..... | 96¼ | 96¼ | 97 |
| Richmond Traction 5s..... | 106 | 106 | 107 |
| United Railways 1st 4s, 1948..... | 86½ | 87 | 88 |
| United Railways Inc. 4s, 1949..... | 53½ | 53½ | 54 |
| United Railways Funding 5s..... | 83¼ | 83¼ | 84 |

| Miscellaneous Bonds. | Par. | Bid. | Asked. |
|--------------------------------------|------|------|--------|
| Baltimore Electric Power 5s..... | 90 | 91 | 92 |
| Consolidated Gas 6s, 1910..... | 104 | 105 | 106 |
| Consolidated Gas 5s, 1939..... | 108½ | 109½ | 110 |
| Consolidated Gas 4½s..... | 94 | 96 | 97 |
| Con. Gas, Elec. Lt. & Power 4½s..... | 82 | 82 | 83 |
| G.B.-S. Brewing 1sts..... | 52½ | 53 | 54 |
| G.B.-S. Brewing 2d Incomes..... | 22½ | 22½ | 23 |
| Maryland Telephone 5s..... | 86 | 87 | 88 |
| Mt. Vernon-Woodby Cot. Duck 5s..... | 79¾ | 80 | 81 |
| United Elec. Lt. & Power 4½s..... | 89 | 90¼ | 91 |

SOUTHERN COTTON-MILL STOCKS.

Quotations Furnished by Hugh MacRae & Co., Wilmington, N. C., for Week Ending May 18.

| | Bid. | Asked. |
|--|------|--------|
| Abbeville Cotton Mills (S. C.)..... | 82 | 83 |
| Alken Mfg. Co. (S. C.)..... | 85 | 86 |
| Anderson Cotton Mills (S. C.)..... | 90 | 91 |
| Arkwright Mills (S. C.)..... | 112½ | 113 |
| Augusta Factory (Ga.)..... | 80 | 81 |
| Avondale Mills (Ala.)..... | 112 | 113 |
| Belton Mills (S. C.)..... | 106 | 107 |
| Bibb Mfg. Co. (Ga.)..... | 113½ | 114 |
| Brandon Mills (S. C.)..... | 128 | 129 |
| Cabarrus Cotton Mills (N. C.)..... | 121 | 122 |
| Chadwick Mfg. Co. (N. C.) Pfd..... | 100 | 101 |
| Chiquola Mfg. Co. (S. C.)..... | 112½ | 113 |
| Clifton Mfg. Co. (S. C.)..... | 116 | 117 |
| Clifton Mfg. Co. (S. C.) Pfd..... | 101½ | 102 |
| Clinton Cotton Mills (S. C.)..... | 150 | 151 |
| Columbus Mfg. Co. (Ga.)..... | 96 | 97 |
| Courtenay Mfg. Co. (S. C.)..... | 100 | 101 |
| Dallas Mfg. Co. (Ala.)..... | 80 | 81 |
| Darlington Mfg. Co. (S. C.)..... | 80 | 81 |
| Eagle & Phenix Mills (Ga.)..... | 130 | 131 |
| Easley Cotton Mills (S. C.)..... | 140 | 141 |
| Enoree Mfg. Co. (S. C.)..... | 80 | 81 |
| Enoree Mfg. Co. (S. C.) Pfd..... | 100½ | 101 |
| Enterprise Mfg. Co. (Ga.)..... | 90 | 91 |
| Exposition Cotton Mills (Ga.)..... | 200 | 201 |
| Gaffney Mfg. Co. (S. C.)..... | 96½ | 97 |
| Gainesville Cotton Mills (Ga.)..... | 58 | 59 |
| Granby Cot. Mills (S. C.) 1st Pfd..... | 70 | 71 |
| Graniteville Mfg. Co. (S. C.)..... | 166 | 167 |
| Greenwood Cotton Mills (S. C.)..... | 93 | 94 |
| Grendel Mills (S. C.)..... | 115 | 116 |
| Henrietta Mills (N. C.)..... | 175 | 176 |
| John P. King Mfg. Co. (Ga.)..... | 103 | 104 |
| Lancaster Cotton Mills (S. C.)..... | 114 | 115 |
| Lancaster Cotton Mills (S. C.) Pfd..... | 95 | 96 |
| Langley Mfg. Co. (S. C.)..... | 92 | 93 |
| Laurens Cotton Mills (S. C.)..... | 160 | 161 |
| Limestone Mills (S. C.)..... | 97 | 98 |
| Lockhart Mills (S. C.)..... | 97 | 98 |
| Lockhart Mills (S. C.) Pfd..... | 97 | 98 |
| Louise Mills (N. C.)..... | 90 | 91 |
| Louise Mills (N. C.) Pfd..... | 98 | 99 |
| Marlboro Cotton Mills (S. C.)..... | 88 | 89 |
| Mayo Mills (N. C.)..... | 185 | 186 |
| Mills Mfg. Co. (S. C.)..... | 110 | 111 |
| Mills Mfg. Co. (S. C.) Pfd..... | 99 | 100 |
| Monaghan Mills (S. C.)..... | 112 | 113 |
| Monarch Cotton Mills (S. C.)..... | 118 | 119 |
| Newberry Cotton Mills (S. C.)..... | 135 | 136 |
| Norris Cotton Mills (S. C.)..... | 115 | 116 |
| Olympia Cotton Mills (S. C.) Pfd..... | 75 | 76 |
| Orangeburg Mfg. Co. (S. C.) 1st Pfd..... | 80 | 81 |
| Orr Cotton Mills (S. C.)..... | 106 | 107 |
| Pacolet Mfg. Co. (S. C.)..... | 175 | 176 |
| Pacolet Mfg. Co. (S. C.) Pfd..... | 101½ | 102½ |
| Pelzer Mfg. Co. (S. C.)..... | 170 | 171 |
| Piedmont Mfg. Co. (S. C.)..... | 170 | 171 |
| Poe Mfg. Co. (S. C.)..... | 127½ | 128 |
| Richland Cot. Mills (S. C.) Pfd..... | 62½ | 63 |
| Raleigh Cotton Mills (N. C.)..... | 99 | 100 |
| Roanoke Mills (N. C.)..... | 200 | 201 |
| Saxon Mills (S. C.)..... | 130 | 131 |
| Sibley Mfg. Co. (Ga.)..... | 63 | 64 |
| Spartan Mills (S. C.)..... | 150 | 151 |
| Springstein Mills (S. C.)..... | 100 | 101 |
| Tuapau Mfg. Co. (Ga.)..... | 130 | 131 |
| Tuapau Mfg. Co. (S. C.)..... | 156 | 157 |
| Union-Buffalo 2d Pfd..... | 76 | 77 |
| Victor Mfg. Co. (S. C.)..... | 130 | 131 |
| Warren Mfg. Co. (S. C.)..... | 92 | 93 |
| Warren Mfg. Co. (S. C.) Pfd..... | 106 | 107 |
| Washington Mills (Va.)..... | 30 | 31 |
| Washington Mills (Va.) Pfd..... | 100 | 101 |
| Whitney Mfg. Co. (S. C.)..... | 145 | 146 |
| Wiscasset Mills (N. C.)..... | 130 | 131 |
| Woodruff Cotton Mills (S. C.)..... | 126 | 127 |

Quotations Furnished by William S. Glenn, Broker, Spartanburg, S. C., for Week Ending May 20.

| | Bid. | Asked. |
|--|------|--------|
| Abbeville Cotton Mills (S. C.)..... | 80 | 81 |
| Aetna Cotton Mills (S. C.) Pfd..... | 87 | 88 |
| Alken Mfg. Co. (S. C.)..... | 82 | 83 |
| American Spinning Co. (S. C.)..... | 125 | 126 |
| Anderson Cotton Mills (S. C.)..... | 100 | 101 |
| Arcadia Mills (S. C.)..... | 94 | 95 |
| Arkwright Cotton Mills (S. C.)..... | 112 | 113 |
| Augusta Factory (Ga.)..... | 80 | 81 |
| Avondale Mills (Ala.)..... | 110 | 111 |
| Belton Mills (S. C.)..... | 106 | 107 |
| Bibb Mfg. Co. (Ga.)..... | 115 | 116 |
| Brandon Mills (S. C.)..... | 130 | 131 |
| Brogan Mills (S. C.)..... | 55 | 56 |
| Cabarrus Cotton Mills (N. C.)..... | 120 | 121 |
| Chadwick Mfg. Co. (N. C.) Pfd..... | 103 | 104 |
| Chiquola Mfg. Co. (S. C.)..... | 109 | 110 |
| Clifton Mfg. Co. (S. C.)..... | 120 | 121 |
| Clifton Mfg. Co. (S. C.) Pfd..... | 103 | 104 |
| Clinton Cotton Mills (S. C.)..... | 155 | 156 |
| Columbus Mfg. Co. (S. C.)..... | 94 | 95 |
| Courtenay Mfg. Co. (S. C.)..... | 94 | 95 |
| Dallas Mfg. Co. (S. C.)..... | 92 | 93 |
| Darlington Mfg. Co. (S. C.)..... | 80 | 81 |
| D. E. Converse Co. (S. C.)..... | 112 | 113 |
| Eagle & Phenix Mills (Ga.)..... | 128 | 129 |
| Easley Cotton Mills (S. C.)..... | 130 | 131 |
| Enoree Mfg. Co. (S. C.)..... | 75 | 76 |
| Enoree Mfg. Co. (S. C.) Pfd..... | 100 | 101 |
| Enterprise Mfg. Co. (S. C.)..... | 102 | 103 |
| Exposition Cotton Mills (Ga.)..... | 174 | 175 |
| Gaffney Mfg. Co. (S. C.)..... | 94 | 95 |
| Gainesville Cotton Mills (Ga.)..... | 45 | 46 |
| Glenwood Cotton Mills (S. C.)..... | 105 | 106 |
| Gluck Mills (S. C.)..... | 94 | 95 |
| Granby Cot. Mills (S. C.) 1st Pfd..... | 50 | 51 |
| Graniteville Mfg. Co. (S. C.)..... | 160 | 161 |
| Greenwood Cotton Mills (S. C.)..... | 94 | 95 |
| Grendel Mills (S. C.)..... | 115 | 116 |
| Hartsville Cotton Mill (S. C.)..... | 107 | 108 |
| Henrietta Mills (N. C.)..... | 165 | 166 |
| Inman Mills (S. C.)..... | 102 | 103 |
| King Mfg. Co. J. P. (Ga.)..... | 97 | 98 |
| Lancaster Cotton Mills (S. C.)..... | 102 | 103 |
| Lancaster Cot. Mills (S. C.) Pfd..... | 92 | 93 |
| Langley Mfg. Co. (S. C.)..... | 92 | 93 |
| Laurens Mills (S. C.)..... | 152 | 153 |
| Limestone Mills (S. C.)..... | 125 | 126 |
| Lockhart Mills (S. C.)..... | 97 | 98 |
| Lockhart Mfg. Co. (S. C.) Pfd..... | 101 | 102 |
| Loray Cotton Mills (N. C.) Pfd..... | 99 | 100 |
| Louise Mills (N. C.)..... | 90 | 91 |
| Louise Mills (N. C.) Pfd..... | 102 | 103 |
| Marlboro Cotton Mills (S. C.)..... | 90 | 91 |
| Mayo Mills (N. C.)..... | 200 | 201 |
| Mills Mfg. Co. (S. C.)..... | 105 | 106 |
| Mollioth Mfg. Co. (S. C.)..... | 112 | 113 |
| Monaghan Mills (S. C.)..... | 114 | 115 |
| Monarch Cotton Mills (S. C.)..... | 127 | 128 |
| Newberry Cotton Mills (S. C.)..... | 135 | 136 |
| Ninety-Six Cotton Mills (S. C.)..... | 104 | 105 |
| Norris Cotton Mills (S. C.)..... | 106 | 107 |
| Odell Mfg. Co. (N. C.)..... | 90 | 91 |
| Orangeburg Mfg. Co. (S. C.) Pfd..... | 80 | 81 |
| Orr Cotton Mills (S. C.)..... | 100 | 101 |
| Pacolet Mfg. Co. (S. C.)..... | 170 | 171 |

Alabama Bankers.

At the annual convention of the Alabama Bankers' Association, held at Birmingham May 17 and 18, the following officers were elected to serve for the ensuing year: President, E. J. Buck, Mobile; vice-president, W. P. G. Harding, Birmingham; secretary-treasurer, McLane Tilton, Jr., Pell City; group vice-presidents—No. 1, Robertson, Cullman; No. 2, H. L. McElderry, Talladega; No. 3, Geo. A. Searcy, Tuscaloosa; No. 4, Jeff Blount, Greensboro, and No. 5, L. B. Farley, Montgomery.

At Rocky Mount, N. C., bids will be received until June 6 for \$155,000 of 5 per cent. school and improvement bonds. Mayor W. L. Thorp says that Rocky Mount has grown in population from 2934 in June, 1900, to 7000 in 1907. Further particulars will be found in the advertising columns.

New Corporations.

Reports state that local parties are organizing a national bank at Poolesville, Md.

The Farmers and Merchants' Bank of Malakoff, Texas, is reported to have opened for business.

Local citizens are reported to be organizing a national bank at Petersburg, W. Va., with \$25,000 capital.

The South Arkansas Bank & Trust Co. of Fordyce, Ark., capital \$25,000, will begin business about July 1 with J. E. Hampton as president.

The First National Bank of Springdale, Ark., capital \$58,000, is being organized by C. G. Dodson, S. H. Slaughter, C. N. Furry and J. P. Deaver.

